

October 6, 2020

Beth Howell, VMRC
380 Fenwick Road
Ft. Monroe, VA 23651

**RE: Timberlake Sediment Removal Project
Non-Tidal Joint Permit Application
Campbell County, Virginia
H&P Project 20190186**

Dear Beth,

Attached, please find a non-tidal Joint Permit Application (JPA) for the proposed Timberlake Sediment Removal Project in Campbell County. Please review this JPA, distribute to appropriate regulatory agencies for review and permitting, and call with any questions. The drainage area is less than five (5) square miles. The project is being proposed by the Timberlake Watershed Improvement District (TWID), and will involve property owned/managed by the Timberlake Homeowners' Association (THA).

Proposed Project

The sediment collection project is part of a comprehensive long-term Timberlake reservoir conservation management plan being developed and undertaken by the TWID. The TWID was formally created and certified to the VA SWWCB in accordance with section § 10.1-620 Code of Virginia on April 25, 2019, after a public hearing held on December 20, 2018 determined there was a need for the District in the interest of public health, safety and welfare. The Timberlake reservoir provides many benefits including drinking water supply to Campbell County, flood control, and a diverse ecosystem including fish and wildlife habitat. The design intent of the project is to keep the reservoir safe and healthy, and to sustain its diverse ecosystem by collecting accumulated sediment transported by erosion and stormwater run-off from upstream watershed land use and highway infrastructure activities. Specifically, this project will increase the depth of water in the cove areas of the reservoir, increase the reservoir's water capacity, and remove excess nutrients causing eutrophication and dissolved oxygen (DO) depletion. Collecting the sediment in the proposed area of the reservoir will improve overall water quality, plant, invertebrate, wildlife and fish habitat, as well as navigation and accessibility.

Sediment will be removed from five (5) coves around the lake. Hydraulically-dredged sediment will be wasted / placed on the applicant's-owned property southwest of the dam (where soil was previously removed to re-construct the dam itself). An estimated 17,500 cubic yards (cy) of wet sediment will be removed and pumped to the disposal site, and will be de-watered (using geotextile sediment bags) to produce an estimated 14,000 cy of dry sediment/soil material. No permanent impacts to streams or wetlands are anticipated. Approximately six acres (ac) of surface water will be affected by the proposed dredging work, with an additional estimated two ac of disturbance at the sediment disposal site. The Buffalo Creek watershed at the dam is approximately 3.8 sq miles. The sediment removal contractor will test and record the return water three times a day during active operations, and will ensure that turbidity is less than 35 NTU's. Return water discharge will be across the existing concrete spillway, to help reduce soil erosion potential.



Construction Sequence

The following construction sequence is being proposed for this project:

- 1) Installation of perimeter erosion control measures at sediment disposal site
- 2) Removal and stockpile of approximately 7,400 cy of soil/topsoil at the disposal site
- 3) Installation of turbidity curtain in the lake at the water return site (near dam)
- 4) Launching and positioning of dredging barge(s)
- 5) Anchoring of temporary floating pumps and lines across lake
- 6) Hydraulic dredging of fives coves, with material to be pumped to de-watering site
- 7) De-watering of pumped sediment at disposal site (using 6.5' dia x 100' sediment bags)
- 8) De-mobilization of dredging equipment, pumps, and lines
- 9) Spreading of stockpiled topsoil after sediment placement is complete at disposal site
- 10) Seeding and mulching of disturbed soil areas
- 11) Gradual water infiltration to soil (from sediment bags) for 1-2 weeks

Existing Conditions

The existing dam and lake were constructed in the 1920's. The current dam was rebuilt in 1995-1996, after damage from a Q100 (100-year) flood. The lake is currently used for recreation, serves as a Campbell County public water supply reservoir, and helps provide downstream flood protection. Some maintenance dredging has previously occurred in Waterlick Creek cove.

Water Quality

The subject property is located within the Buffalo Creek watershed (Hydrologic Unit Code 030101011502, RU56), which is part of the larger Roanoke River Basin. Water quality in Buffalo Creek and its tributaries has not been evaluated by the Virginia Department of Environmental Quality (VDEQ). These stream channels are classified as Class III surface waters (Category 3A).

Floodplains

The Federal Emergency Management Agency (FEMA) online Flood Insurance Rate Map (FIRM) FIRMette mapping system indicates the presence of a mapped Flood Hazard Area Zone AE (100-year floodplain with a Base Flood Elevation [BFE] of 793' MSL at its closest point) downstream of Timberlake and the proposed sediment disposal area (per FEMA FIRMette Map Panel 51031C0092D, dated 8/28/2008). No filling or excavation is proposed in a regulated flood hazard area. Existing elevations at the disposal site range from approximately 804' MSL to 832' MSL.

Cultural Resources

Available records from the Virginia Department of Historic Resources (VDHR) V-CRIS system have been evaluated for the proposed project site, to determine if any on-site or nearby resources are Eligible for Listing on the National Register of Historic Places (NRHP). VDHR-mapped cultural resources include the following:



Table 1: Cultural Resources

Resource	VDHR ID	Location	VDHR Determination
Timberlake Dam	015-5007	720' to SW	Not Eligible

Sediment Sampling/Testing

The TWID proposes daily on-site testing for potential petroleum hydrocarbons, using a portable photo-ionization detector (PID)/meter (to help ensure that concentrations are below 50 mg/kg). Previous sediment testing indicated a total petroleum hydrocarbon (TPH) diesel range organic (DRO) concentration of approximately 8.4mg/kg and a gasoline range organic (GRO) concentration of Non-Detect (<0.91 mg/kg). Approximately 98% of tests (46 of 47) for volatile organic compounds (VOC's) and 97% of tests (66 of 68) for semi-volatile organic compounds (SVOC's) were Non-Detect. Certified laboratory analysis indicates the concentrations of analytes are higher in the existing disposal area soil than the sediment with the exception of Chromium VI. Chromium VI concentrations were slightly higher in the sediment sample (0.50 mg/kg) than the soil (0.26 mg/kg); however, this level was significantly lower by factors of 52X, 38.2X and 11.2X than the VDEQ Cr(VI) Ecological Screening Level (26.0 mg/kg), the VDEQ Groundwater Protection Screening Level (19.1 mg/kg), and the VDEQ Commercial/Industrial Screening Level (5.6 mg/kg) thresholds. The proposed sediment disposal area was re-zoned in 2020 for commercial/industrial use only.

Protected Species

To document the potential presence of protected species nearby, records from three databases were reviewed for this report. These included the U.S. Fish and Wildlife Service (USFWS) ECOS-IPaC online system, the Virginia Department of Wildlife Resources (VDWR) VFWIS online system, and the Virginia Department of Conservation and Recreation (VDCR) Natural Heritage Database Explorer (NHDE) online system. These databases indicated the potential presence of the following species in the surrounding area:

Table 2: Protected Species

VDGIF VAFWIS (common name)	Scientific name	Organism	Classification
Roanoke logperch	<i>Percina rex</i>	Fish	FESE
James spiny mussel	<i>Parvaspina collina</i>	Mussel	FESE
Northern long-eared bat	<i>Myotis septentrionalis</i>	Mammal	FTST
Yellow lance	<i>Elliptio lanceolata</i>	Mussel	FTST
Little brown bat	<i>Myotis lucifugus lucifugus</i>	Mammal	SE
Tri-colored bat	<i>Perimyotis subflavus</i>	Mammal	SE
Spirit supercoil	<i>Paravitrea hera</i>	Mollusk	SE
Peregrine falcon	<i>Falco peregrinus</i>	Bird	ST
Loggerhead shrike	<i>Lanius ludovicianus</i>	Bird	ST
Henslow's sparrow	<i>Centronyx henslowii</i>	Bird	ST
Atlantic pigtoe	<i>Fusconaia masoni</i>	Mussel	FPST
Green floater	<i>Lasmigona subviridis</i>	Mussel	ST
Orange-fin madtom	<i>Noturus gilberti</i>	Fish	ST
Carolina darter	<i>Etheostoma collis</i>	Fish	ST
Migrant loggerhead shrike	<i>Lanius ludovicianus migrans</i>	Bird	ST
VDCR NHDE (common name)	Scientific name	Organism	Classification
N/A	N/A	N/A	N/A
USFWS IPaC (common name)	Scientific name	Organism	Classification
Northern long-eared bat	<i>Myotis septentrionalis</i>	Mammal	FTST

FE – Federal Endangered, FT – Federal Threatened, SE – State Endangered, ST – State Threatened, FP – Federal Potential Listing



Seven aquatic species (four mussels, three fish) and eight terrestrial species (four birds, three bats, one mollusk) were noted by the VFWIS database (no species listed in other two databases). The proposed dredging project will affect aquatic (lacustrine) habitat, but only a small area of terrestrial habitat (actively managed/mowed grass). As a result, the greatest potential for faunal impacts will likely be to aquatic species. James spinymussel does not appear to have been found in this watershed, but may be present in nearby James River watersheds. VFWIS records indicate that a portion of Timberlake and Buffalo Creek downstream may be potential habitat for Roanoke logperch and Roanoke bass. The three listed mussel species all generally prefer high-quality streams and rivers with sandy substrate, rather than impounded lakes. Neither these nor orangefin madtom have been confirmed on-site or near the project site. Since no structures will be demolished, the site is located in a developed/urbanized area (within city limits of Lynchburg), and no tree clearing is proposed, the potential for bat impacts should be minimal. Avian habitat on-site is similar to other habitats nearby, and throughout the City/County. As a result, no protected species impacts are anticipated.

Conclusion

Please contact us with any questions regarding this project. We can be reached at 540.520.1533 or via email (at bleatherland@handp.com).

Sincerely,
HURT & PROFFITT, INC.

Ben Leatherland, PWD, PWS
Sr. Environmental Scientist

Attachments: Attachment A - Joint Permit Application Form
 Attachment B - Maps and Figures
 Attachment C - Photographs
 Attachment D - Protected Species Database Records
 Attachment E - Cultural Resource Records
 Attachment F - Construction Drawing Excerpts

cc: Timberlake Homeowners' Association
Timberlake Watershed improvement District
File



ATTACHMENT A

JOINT PERMIT APPLICATION

FOR AGENCY USE ONLY

	Notes:
JPA#	

APPLICANTS

PLEASE PRINT OR TYPE ALL ANSWERS. If a question does not apply to your project, please print N/A (not applicable) in the space provided. **If additional space is needed, attach extra 8 ½ x 11 inch sheets of paper.**

Check all that apply

<input type="checkbox"/> Pre-Construction Notification (PCN)	<input checked="" type="checkbox"/> SPGP	<input type="checkbox"/> DEQ Reapplication Existing permit number: _____	<input type="checkbox"/> Receiving federal funds Agency providing funding: _____
<input type="checkbox"/> NWP # _____			
<input type="checkbox"/> RP # 05 <i>(For NWP's & RP 05 ONLY - No DEQ-VWP permit writer will be assigned)</i>			
<input type="checkbox"/> Regional Permit 17 Checklist (RP-17)			

PREVIOUS ACTIONS RELATED TO THE PROPOSED WORK (Include all federal, state, and local pre application coordination, site visits, previous permits, or applications whether issued, withdrawn, or denied)

Historical information for past permit submittals can be found online with VMRC - <https://webapps.mrc.virginia.gov/public/habitat/> - or VIMS - <http://ccm.vims.edu/perms/newpermits.html>

Agency	Action / Activity	Permit/Project number, including any non-reporting Nationwide permits previously used (e.g., NWP 13)	Date of Action	If denied, give reason for denial
VDEQ	Pre-app conf call	N/A	May 2020	N/A

1. APPLICANT, AGENT, PROPERTY OWNER, AND CONTRACTOR INFORMATION

The applicant(s) is/are the legal entity to which the permit may be issued (see How to Apply at beginning of form). The applicant(s) can either be the property owner(s) or the person/people/company(ies) that intend(s) to undertake the activity. The agent is the person or company that is representing the applicant(s). If a company, please also provide the company name that is registered with the State Corporation Commission (SCC), or indicate no registration with the SCC.

Legal Name(s) of Applicant(s) Timberlake Watershed Improvement District			Agent (if applicable) Hurt & Proffitt, Inc.		
Mailing address 614 South Timberlake Drive			Mailing address 2524 Langhorne Road		
City Lynchburg	State VA	ZIP Code 24502	City Lynchburg	State VA	ZIP Code 24501
Phone number w/area code N/A	Fax N/A	Phone number w/area code 434.847.7796	Fax 434.847.0047		
Mobile 434-401-0577	E-mail georgeschrader111@gmail.com	Mobile 540.520.1533	E-mail bleatherland@handp.com		
State Corporation Commission Name and ID number (if applicable) N/A			State Corporation Commission Name and ID number (if applicable) Fed Tax ID 54-0924377, SCC 0142895-2		

Certain permits or permit authorizations may be provided via electronic mail. If the applicant wishes to receive their permit via electronic mail, please provide an e-mail address here: georgeschrader111@gmail.com, bleatherland@handp.com

1. APPLICANT, AGENT, PROPERTY OWNER, AND CONTRACTOR INFORMATION (Continued)

Property owner(s) legal name, if different from applicant Timberlake Homeowners' Association			Contractor, if known		
Mailing address 614 South Timberlake Drive			Mailing address		
City Lynchburg	State VA	ZIP code 24502	City	State	ZIP code
Phone number w/area code N/A	Fax N/A		Phone number w/area code	Fax	
Mobile 434.509.7031	E-mail ddcgillett@gmail.com		Mobile	E-mail	
State Corporation Commission Name and ID number (if applicable) <small>SCC 03501764</small>			State Corporation Commission Name ID number (if applicable)		

2. PROJECT LOCATION INFORMATION
(Attach a copy of a detailed map, such as a USGS topographic map or street map showing the site location and project boundary, so that it may be located for inspection. Include an arrow indicating the north direction. Include the drainage area if the SPGP box is checked on Page 7.)

Street Address (911 address if available) 614 South Timberlake Drive	City/County/ZIP Code Campbell County (24502)
Subdivision Timberlake	Lot/Block/Parcel # 20H-1WQD-115A and 20H-1-A
Name of water body(ies) within project boundaries and drainage area (acres or square miles). Timberlake (3.8sm), which includes Buffalo Creek (1.9sm) and 2 un-named tributaries (0.8sm and 0.9sm)	
Tributary(ies) to: <u>Buffalo Creek</u> Basin: <u>Roanoke River</u> Sub-basin: <u>Upper Roanoke - Lower Big Otter River</u> (Example: Basin: <u>James River</u> Sub-basin: <u>Middle James River</u>)	
Special Standards (based on DEQ Water Quality Standards 9VAC25-260 et seq.): <u>N/A (VDEQ Class III, Category 3A surface waters)</u>	
Project type (check one) <input type="checkbox"/> Single user (private, non-commercial, residential) <input checked="" type="checkbox"/> Multi-user (community, commercial, industrial, government) <input type="checkbox"/> Surface water withdrawal	
Latitude and longitude at center of project site (decimal degrees): <u>37.312080 N</u> / <u>-79.273410 W</u> (Example: 37.33164/-77.68200)	
USGS topographic map name: <u>Forest, VA (1963/2019)</u>	
8-digit USGS Hydrologic Unit Code (HUC) for your project site (See http://cfpub.epa.gov/surf/locate/index.cfm); <u>03010101</u> If known, indicate the 10-digit and 12-digit USGS HUCs (see http://consapps.dcr.virginia.gov/htdocs/maps/HUExplorer.htm): <small>0301010115 - Lower Big Otter River (RU-0) 030101011502 - Buffalo Creek (RU56)</small>	
Name of your project (Example: <i>Water Creek driveway crossing</i>) <u>Timberlake Sediment Removal Project</u>	
Is there an access road to the project? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No. If yes, check all that apply: <input checked="" type="checkbox"/> public <input type="checkbox"/> private <input checked="" type="checkbox"/> improved <input type="checkbox"/> unimproved	
Total size of the project area (in acres): <u>Approximately 8 acres (6 acres sediment removal + 2 ac disposal site)</u>	

2. PROJECT LOCATION INFORMATION (Continued)

Provide driving directions to your site, giving distances from the best and nearest visible landmarks or major intersections:
 From Lynchburg, take Hwy 460 (Lynchburg Hwy) southwest for approximately 8 miles. Turn right onto Timberlake Rd and go northeast approximately 0.5 mile. Turn left onto Grove Ave, and go northwest approximately 0.4 mile. Timberlake is located to the southwest.

Does your project site cross boundaries of two or more localities (i.e., cities/counties/towns)? Yes No

If so, name those localities: N/A

3. DESCRIPTION OF THE PROJECT, PROJECT PRIMARY AND SECONDARY PURPOSES, PROJECT NEED, INTENDED USE(S), AND ALTERNATIVES CONSIDERED (Attach additional sheets if necessary)

- The purpose and need must include any new development or expansion of an existing land use and/or proposed future use of residual land.
- Describe the physical alteration of surface waters, including the use of pilings (#, materials), vibratory hammers, explosives, and hydraulic dredging, when applicable, and whether or not tree clearing will occur (include the area in square feet and time of year).
- Include a description of alternatives considered and measures taken to avoid or minimize impacts to surface waters, including wetlands, to the maximum extent practicable. Include factors such as, but not limited to, alternative construction technologies, alternative project layout and design, alternative locations, local land use regulations, and existing infrastructure
- For utility crossings, include both alternative routes and alternative construction methodologies considered
- For surface water withdrawals, public surface water supply withdrawals, or projects that will alter in stream flows, include the water supply issues that form the basis of the proposed project.

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Sediment will be removed from five (5) coves around the lake. Hydraulically-dredged sediment will be wasted / placed on applicant's-owned property southwest of the dam (where soil was previously removed to re-construct the dam itself). An estimated 17,500 cubic yards (cy) of wet sediment will be removed and pumped to the disposal site, and will be de-watered (using geotextile sediment bags) to produce an estimated 14,000 cy of dry sediment/soil material. No permanent impacts to streams or wetlands are anticipated. Approximately six acres (ac) of surface water will be affected by the proposed dredging work, with an additional estimated two ac of disturbance at the sediment disposal site. The Buffalo Creek watershed at the dam is approximately 3.8 sq miles. The sediment removal contractor will test and record the return water three times a day during active operations, and will ensure that turbidity is less than 35 NTU's. Return water discharge will be across the existing concrete spillway, to help reduce soil erosion potential. No tree clearing is proposed.

Date of proposed commencement of work (MM/DD/YYYY)

02/15/2021

Date of proposed completion of work (MM/DD/YYYY)

06/15/2021

Are you submitting this application at the direction of any state, local, or federal agency? Yes No

Has any work commenced or has any portion of the project for which you are seeking a permit been completed?

Yes No

If you answered "yes" to either question above, give details stating when the work was completed and/or when it commenced, who performed the work, and which agency (if any) directed you to submit this application. In addition, you will need to clearly differentiate between completed work and proposed work on your project drawings.

N/A

Are you aware of any unresolved violations of environmental law or litigation involving the property? Yes No
 (If yes, please explain)

N/A

4. PROJECT COSTS

Approximate cost of the entire project, including materials and labor: \$ 550,000
 Approximate cost of only the portion of the project affecting state waters (channelward of mean low water in tidal areas and below ordinary high water mark in nontidal areas): \$ 350,000

5. PUBLIC NOTIFICATION (Attach additional sheets if necessary)

Complete information for all property owners adjacent to the project site and across the waterway, if the waterway is less than 500 feet in width. If your project is located within a cove, you will need to provide names and mailing addresses for all property owners within the cove. If you own the adjacent lot, provide the requested information for the first adjacent parcel beyond your property line. Per Army Regulation (AR 25-51) outgoing correspondence must be addressed to a person or business.
Failure to provide this information may result in a delay in the processing of your application by VMRC.

Property owner's name Property owners adjacent to sediment removal areas will be notified (at same time as JPA submittal)	Mailing address	City	State	ZIP code

Name of newspaper having general circulation in the area of the project: The News & Advance
 Address and phone number (including area code) of newspaper: 101 Wyndale Drive Lynchburg, Va. 24501 (434)-385-5400

Have adjacent property owners been notified with forms in Appendix A? Yes No (attach copies of distributed forms)

6. THREATENED AND ENDANGERED SPECIES INFORMATION

Please provide any information concerning the potential for your project to impact state and/or federally threatened and endangered species (listed or proposed). Attach correspondence from agencies and/or reference materials that address potential impacts, such as database search results or confirmed waters and wetlands delineation/jurisdictional determination. Include information when applicable regarding the location of the project in Endangered Species Act-designated or -critical habitats. Contact information for the U.S. Fish and Wildlife Service, National Oceanic and Atmospheric Administration, Virginia Dept. of Game and Inland Fisheries, and the Virginia Dept. of Conservation and Recreation-Division of Natural Heritage can be found on page 4 of this package.

7. HISTORIC RESOURCES INFORMATION

Note: Historic properties include but are not limited to archeological sites, battlefields, Civil War earthworks, graveyards, buildings, bridges, canals, etc. Prospective permittees should be aware that section 110k of the NHPA (16 U.S.C. 470h-2(k)) prevents the USACE from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the USACE, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant.

Are any historic properties located within or adjacent to the project site? Yes No Uncertain
 If Yes, please provide a map showing the location of the historic property within or adjacent to the project site.

Are there any buildings or structures 50 years old or older located on the project site? Yes No Uncertain
 If Yes, please provide a map showing the location of these buildings or structures on the project site.

Is your project located within a historic district? Yes No Uncertain

If Yes, please indicate which district: N/A

Original dam built in 1920's, rebuilt in 1995-1996 due to flooding damage

7. HISTORIC RESOURCES INFORMATION (Continued)

Has a survey to locate archeological sites and/or historic structures been carried out on the property?

Yes No Uncertain

If Yes, please provide the following information: Date of Survey: N/A

Name of firm: N/A

Is there a report on file with the Virginia Department of Historic Resources? Yes No Uncertain

Title of Cultural Resources Management (CRM) report: N/A

Was any historic property located? Yes No Uncertain

8. WETLANDS, WATERS, AND DUNES/BEACHES IMPACT INFORMATION

Report each impact site in a separate column. If needed, attach additional sheets using a similar table format. Please ensure that the associated project drawings clearly depict the location and footprint of each numbered impact site. For dredging, mining, and excavating projects, use Section 17.

	Impact site number 1	Impact site number 2	Impact site number 3	Impact site number 4	Impact site number 5
Impact description (use all that apply): F=fill EX=excavation S=Structure T=tidal NT=non-tidal TE=temporary PE=permanent PR=perennial IN=intermittent SB=subaqueous bottom DB=dune/beach IS=hydrologically isolated V=vegetated NV=non-vegetated MC=Mechanized Clearing of PFO (Example: F, NT, PE, V)	EX, NT,TE,NV				
Latitude / Longitude (in decimal degrees)	37.312080 N, -79.273410 W				
Wetland/waters impact area (square feet / acres)	Approx. 6 ac (open water area)				
Dune/beach impact area (square feet)	N/A				
Stream dimensions at impact site (length and average width in linear feet, and area in square feet)	N/A				
Volume of fill below Mean High Water or Ordinary High Water (cubic yards)	N/A				

8. WETLANDS/WATERS IMPACT INFORMATION (Continued)					
Cowardin classification of impacted wetland/water or geomorphological classification of stream <i>Example wetland: PFO;</i> <i>Example stream: 'C' channel and if tidal, whether vegetated or non-vegetated wetlands per Section 28.2-1300 of the Code of Virginia</i>	Open Water				
Average stream flow at site (flow rate under normal rainfall conditions in cubic feet per second) and method of deriving it (gage, estimate, etc.)	Approx 180 cfs at bankfull (Q1), per USGS Regional Curve for Piedmont VA streams				
Contributing drainage area in acres or square miles (VMRC cannot complete review without this information)	3.8 sq miles				
DEQ classification of impacted resource(s): Estuarine Class II Non-tidal waters Class III Mountainous zone waters Class IV Stockable trout waters Class V Natural trout waters Class VI Wetlands Class VII https://law.lis.virginia.gov	Non-tidal Class III surface waters				
For DEQ permitting purposes, also submit as part of this section a wetland and waters boundary delineation map – see (3) in the Footnotes section in the form instructions.					
For DEQ permitting purposes, also submit as part of this section a written disclosure of all wetlands, open water, or streams that are located within the proposed project or compensation areas that are also under a deed restriction, conservation easement, restrictive covenant, or other land-use protective instrument.					

9. APPLICANT, AGENT, PROPERTY OWNER, AND CONTRACTOR CERTIFICATIONS
READ ALL OF THE FOLLOWING CAREFULLY BEFORE SIGNING
PRIVACY ACT STATEMENT: The Department of the Army permit program is authorized by Section 10 of the Rivers and Harbors Act of 1899, Section 404 of the Clean Water Act, and Section 103 of the Marine Protection Research and Sanctuaries Act of 1972. These laws require that individuals obtain permits that authorize structures and work in or affecting navigable waters of the United States, the discharge of dredged or fill material into waters of the United States, and the transportation of dredged material for the purpose of dumping it into ocean waters prior to undertaking the activity. Information provided in the Joint Permit Application will be used in the permit review process and is a matter of public record once the application is filed. Disclosure of the requested information is voluntary, but it may not be possible to evaluate the permit application or to issue a permit if the information requested is not provided.
CERTIFICATION: I am hereby applying for permits typically issued by the DEQ, VMRC, USACE, and/or Local Wetlands Boards for the activities I have described herein. I agree to allow the duly authorized representatives of any regulatory or advisory agency to enter upon the premises of the project site at reasonable times to inspect and photograph site conditions, both in reviewing a proposal to issue a permit and after permit issuance to determine compliance with the permit.
In addition, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

9. APPLICANT, AGENT, PROPERTY OWNER, AND CONTRACTOR CERTIFICATIONS (Continued)

Is/Are the Applicant(s) and Owner(s) the same? Yes No

Legal name & title of Applicant Timberlake Watershed Improvement District	Second applicant's legal name & title, if applicable Timberlake Watershed Improvement District
Applicant's signature <i>George W. Schradu III</i>	Second applicant's signature
Date <i>September 29, 2020</i>	Date
Property owner's legal name, if different from Applicant Timberlake Homeowners' Association, Inc.	Second property owner's legal name, if applicable
Property owner's signature, if different from Applicant <i>Denise S. Pruitt</i>	Second property owner's signature
Date <i>9/29/2020</i>	Date

CERTIFICATION OF AUTHORIZATION TO ALLOW AGENT(S) TO ACT ON APPLICANT(S)'S BEHALF (IF APPLICABLE)

I (we), Timberlake Watershed Improvement District (and) N/A,
 APPLICANT'S LEGAL NAME(S) – complete the second blank if more than one Applicant
 hereby certify that I (we) have authorized Hurt & Proffitt (and) N/A
 AGENT'S NAME(S) – complete the second blank if more than one Agent
 to act on my (our) behalf and take all actions necessary to the processing, issuance, and acceptance of this permit and any and all standard and special conditions attached. I (we) hereby certify that the information submitted in this application is true and accurate to the best of my (our) knowledge.

Applicant's signature <i>George W. Schradu III</i>	Second applicant's signature, if applicable
Date <i>September 29, 2020</i>	Date
Agent's signature and title <i>[Signature]</i>	Second agent's signature and title, if applicable
Date <i>Oct. 6, 2020</i>	Date

CONTRACTOR ACKNOWLEDGEMENT (IF APPLICABLE)

I (we), _____ (and) _____,
 APPLICANT'S LEGAL NAME(S) – complete the second blank if more than one Applicant
 have contracted _____ (and) _____
 CONTRACTOR'S NAME(S) – complete the second blank if more than one Contractor
 to perform the work described in this Joint Permit Application, signed and dated _____.

I (we) will read and abide by all conditions as set forth in all federal, state, and local permits as required for this project. I (we) understand that failure to follow the conditions of the permits may constitute a violation of applicable federal, state, and local statutes and that we will be liable for any civil and/or criminal penalties imposed by these statutes. In addition, I (we) agree to make available a copy of any permit to any regulatory representative visiting the project site to ensure permit compliance. If I (we) fail to provide the applicable permit upon request, I (we) understand that the representative will have the option of stopping our operation until it has been determined that we have a properly signed and executed permit and are in full compliance with all of the terms and conditions.

Contractor's name or name of firm (printed/typed)	Contractor's or firm's mailing address	
Contractor's signature and title	Contractor's license number	Date
Applicant's signature	Second applicant's signature, if applicable	
Date	Date	

16. BEACH NOURISHMENT (Continued)

Describe the type(s) of vegetation proposed for stabilization and the proposed planting plan, including schedule, spacing, monitoring, etc. Attach additional sheets if necessary.

17. DREDGING, MINING, AND EXCAVATING

FILL OUT THE FOLLOWING TABLE FOR DREDGING PROJECTS

	NEW dredging				MAINTENANCE dredging			
	Hydraulic		Mechanical (clamshell, dragline, etc.)		Hydraulic		Mechanical (clamshell, dragline, etc.)	
	Cubic yards	Square feet	Cubic yards	Square feet	Cubic yards	Square feet	Cubic yards	Square feet
Vegetated wetlands								
Non-vegetated wetlands								
Subaqueous land	17,500							
Totals	17,500							

Is this a one-time dredging event? Yes No If "no", how many dredging cycles are anticipated: N/A
 (___ initial cycle in cu. yds.) (___ subsequent cycles in cu. yds.)

Composition of material (percentage sand, silt, clay, rock):
 Provide documentation (i.e., laboratory results or analytical reports) that *dredged* material from on-site areas is free of toxics. If not free of toxics, provide documentation of proper disposal (i.e., bill of lading from commercial supplier or disposal site).

Typically 41-52% sand and 48-59% silt/clay. Sediment and soil testing by Pace Analytical and Eurofins labs.

Please include a dredged material management plan that includes specifics on how the dredged material will be handled and retained to prevent its entry into surface waters or wetlands. If on-site dewatering is proposed, please include plan view and cross-sectional drawings of the dewatering area and associated outfall.

See cover letter (Hydraulic sediment removal, with lines to floating pumps, then de-watering and wasting at upland disposal site).

Will the dredged material be used for any commercial purpose or beneficial use? Yes No

If yes, please explain:

N/A

If this is a maintenance dredging project, what was the date that the dredging was last performed? N/A
 Permit number of original permit: N/A (It is important that you attach a copy of the original permit.)

17. DREDGING, MINING, AND EXCAVATING (Continued)

For mining projects: On separate sheets of paper, explain the operation plans, including: 1) the frequency (e.g., every six weeks), duration (i.e., April through September), and volume (in cubic yards) to be removed per operation; 2) the temporary storage and handling methods of mined material, including the dimensions of the containment berm used for upland disposal of dredged material and the need (or no need) for a liner or impermeable material to prevent the leaching of any identified contaminants into ground water; 3) how equipment will access the mine site; and 4) verification that dredging: a) will not occur in water body segments that are currently on the effective Section 303(d) Total Maximum Daily Load (TMDL) priority list ([available at http://www.deq.virginia.gov/Programs/Water/WaterQualityInformationTMDLs/TMDL/TMDLDevelopment/TMDLProgramPriorities.aspx](http://www.deq.virginia.gov/Programs/Water/WaterQualityInformationTMDLs/TMDL/TMDLDevelopment/TMDLProgramPriorities.aspx)) or that have an approved TMDL; b) will not exacerbate any impairment; and c) will be consistent with any waste load allocation/limit/conditions imposed by an approved TMDL (see, "What's in my backyard" or subsequent spatial files at <http://www.deq.virginia.gov/ConnectWithDEQ/VEGIS.aspx> to determine the extent of TMDL watersheds and impairment segments).

Have you applied for a permit from the Virginia Department of Mines, Minerals and Energy? Yes No If Yes:
Existing permit number: ^{N/A} _____ Date permit issued: _____

Contributing drainage area: ^{3.8} _____ square miles

Average stream flow at site (flow rate under normal rainfall conditions): ^{180 cfs at bankfull (Q1) discharge} _____ cfs

18. FILL (not associated with backfilled shoreline structures) AND OTHER STRUCTURES (other than piers and boathouses) IN WETLANDS OR WATERS, OR ON DUNES/BEACHES

Source and composition of fill material (percentage sand, silt, clay, rock):

Provide documentation (i.e., laboratory results or analytical reports) that fill material from off-site locations is free of toxics. If not free of toxics, provide documentation of proper disposal (i.e., bill of lading from commercial supplier or disposal site). Documentation is not necessary for fill material obtained from on-site areas.

Explain the purpose of the filling activity and the type of structure to be constructed over the filled area (if any):

Describe any structure that will be placed in wetlands/waters or on a beach dune and its purpose:

Will the structure be placed on pilings? Yes No

Total area occupied by any structure.
_____ Square Feet

How far will the structure be placed channelward from the back edge of the dune? _____ feet

How far will the structure be placed channelward from the back edge of the beach? _____ feet

19. NONTIDAL STREAM CHANNEL MODIFICATIONS FOR RESTORATION OR ENHANCEMENT, or TEMPORARY OR PERMANENT RELOCATIONS

If proposed activities are being conducted for the purposes of compensatory mitigation, please attach separate sheets of paper providing all information required by the most recent version of the stream assessment methodology approved by the Norfolk District of the U.S. Army Corps of Engineers and the Virginia Department of Environmental Quality, in lieu of completing the questions below. Required information outlined by the methodology can be found at: <http://www.nao.usace.army.mil/Missions/Regulatory/UnifiedStreamMethodology.aspx> or <http://www.deq.virginia.gov/Programs/Water/WetlandsStreams/Mitigation.aspx>.

For all projects proposing stream restoration provide a completed Natural Channel Design Review Checklist and Selected Morphological Characteristics form. These forms and the associated manual can be located at: <https://www.fws.gov/chesapeakebay/StreamReports/NCD%20Review%20Checklist/Natural%20Channel%20Design%20Checklist%20Doc%20V2%20Final%2011-4-11.pdf>

Has the stream restoration project been designed by a local, state, or federal agency? Yes No. If yes, please include the name of the agency here: _____.

Is the agency also providing funding for this project? Yes No

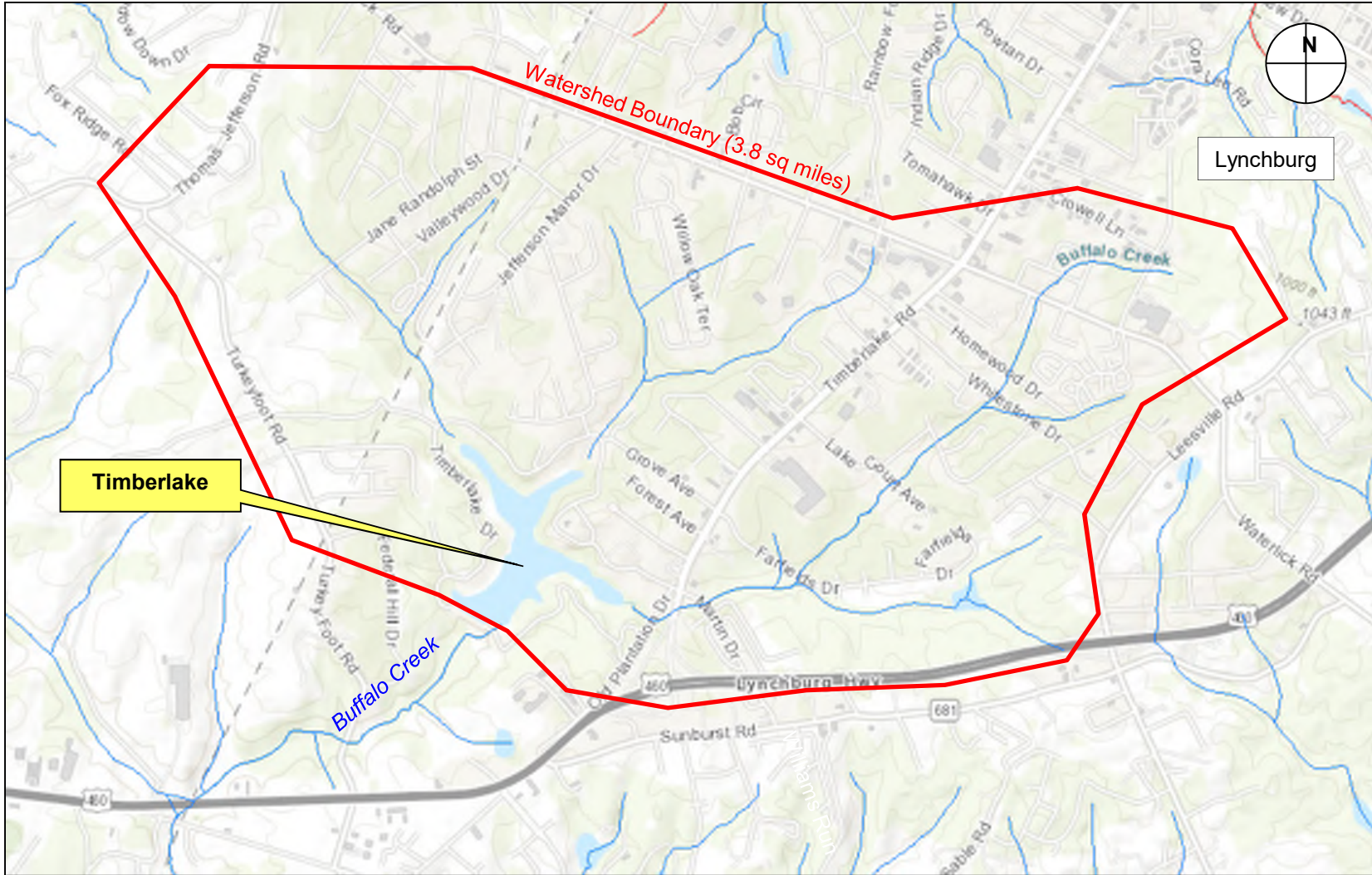
Stream dimensions at impact site (length and average width in linear feet, and area in square feet):
L: _____ (feet) AW: _____ (feet) Area: _____ (square feet)

Contributing drainage area: _____ acres or _____ square miles

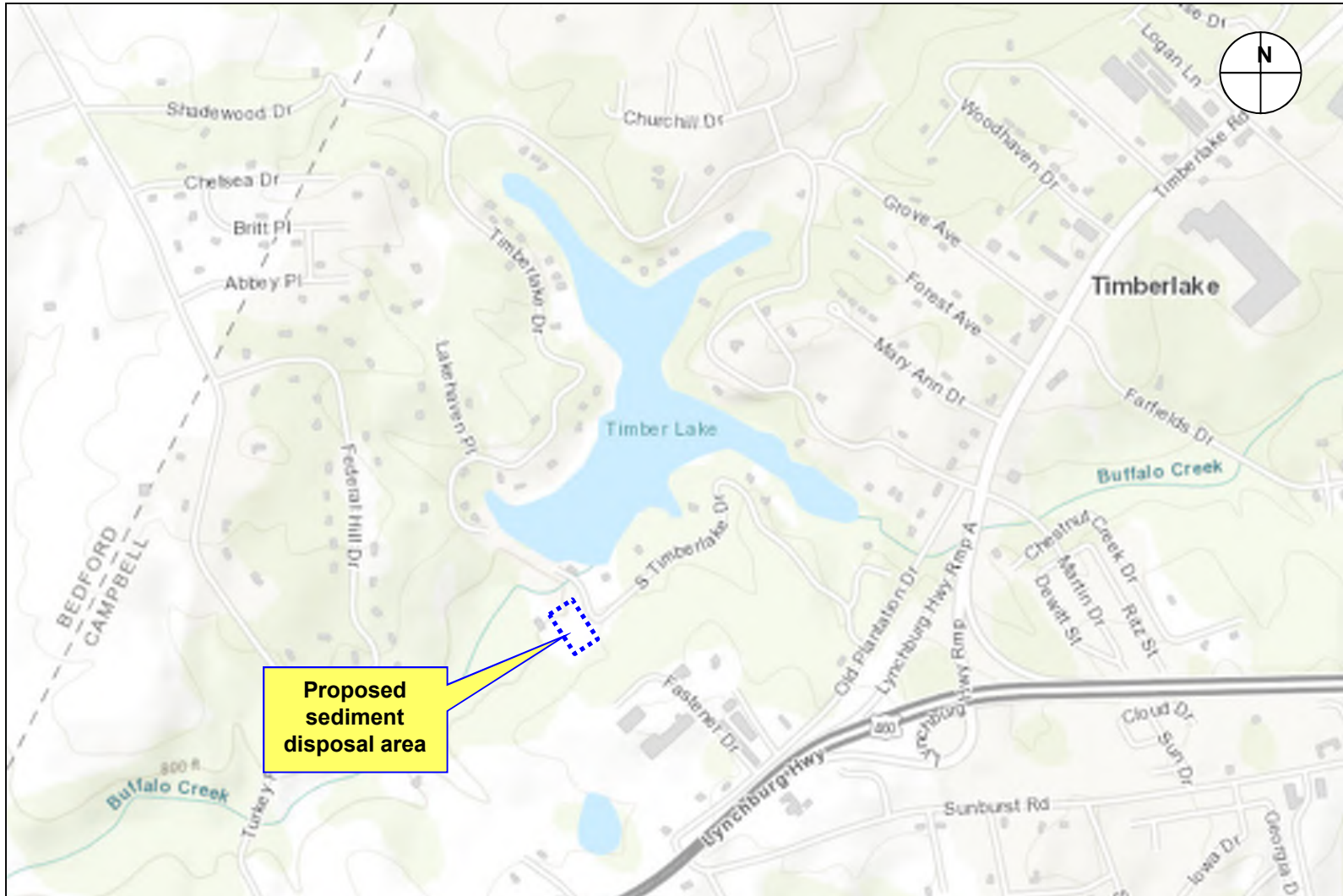


ATTACHMENT B

MAPS AND FIGURES



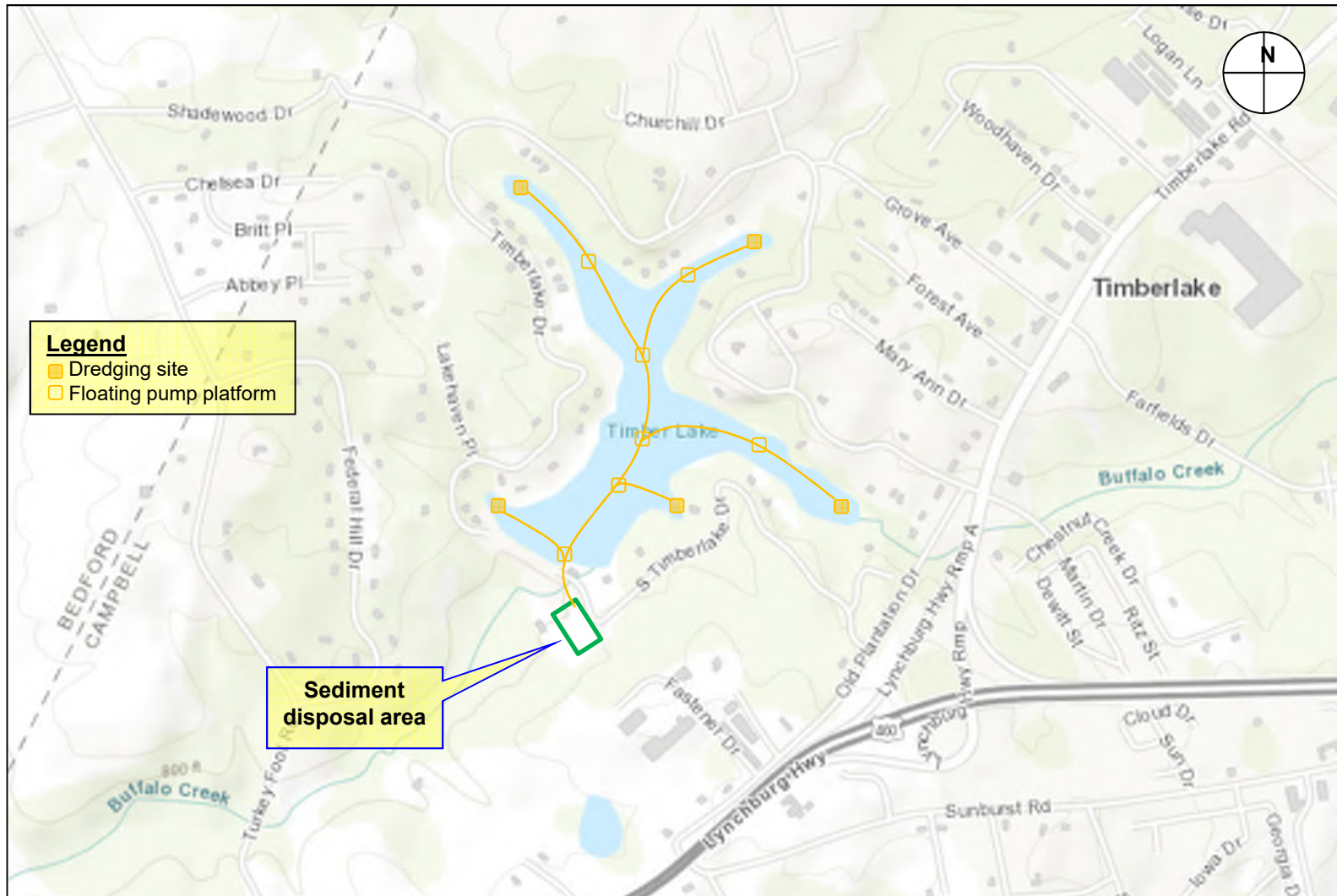
 <p>HURT & PROFFITT INCORPORATE</p> <p>2524 LANGHORNE ROAD LYNCHBURG, VA 24501 800.242.4906 TOLL FREE 434.847.7796 MAIN 434.847.0047 FAX WWW.HANDP.COM</p>	<p>Timberlake Sediment Removal Project Campbell County, Virginia</p> <p>Source: VDEQ VEGIS system (2020), NTS</p>	<p>Location/ Watershed Map</p>	<p>Figure 1</p>
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	<p>HURT & PROFFITT INCORPORATE</p>	<p>2524 LANGHORNE ROAD LYNCHBURG, VA 24501 800.242.4906 TOLL FREE 434.847.7796 MAIN 434.847.0047 FAX WWW.HANDP.COM</p>	<p>Timberlake Sediment Removal Project Campbell County, Virginia</p>	<p>Project Location Map</p>	<p>Figure 2</p>
<p>Source: VDEQ VEGIS system (2020), NTS</p>					



 <p>HURT & PROFFITT INCORPORATE</p>	<p>2524 LANGHORNE ROAD LYNCHBURG, VA 24501 800.242.4906 TOLL FREE 434.847.7796 MAIN 434.847.0047 FAX WWW.HANDP.COM</p>	<p>Timberlake Sediment Removal Project Campbell County, Virginia</p> <p><i>Source: VDEQ VEGIS system (2020), NTS</i></p>	<p>Sediment Disposal Area Map</p>	<p>Figure 3</p>
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INCORPORATE

2524 LANGHORNE ROAD
LYNCHBURG, VA 24501
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**Timberlake Sediment Removal Project
Campbell County, Virginia**

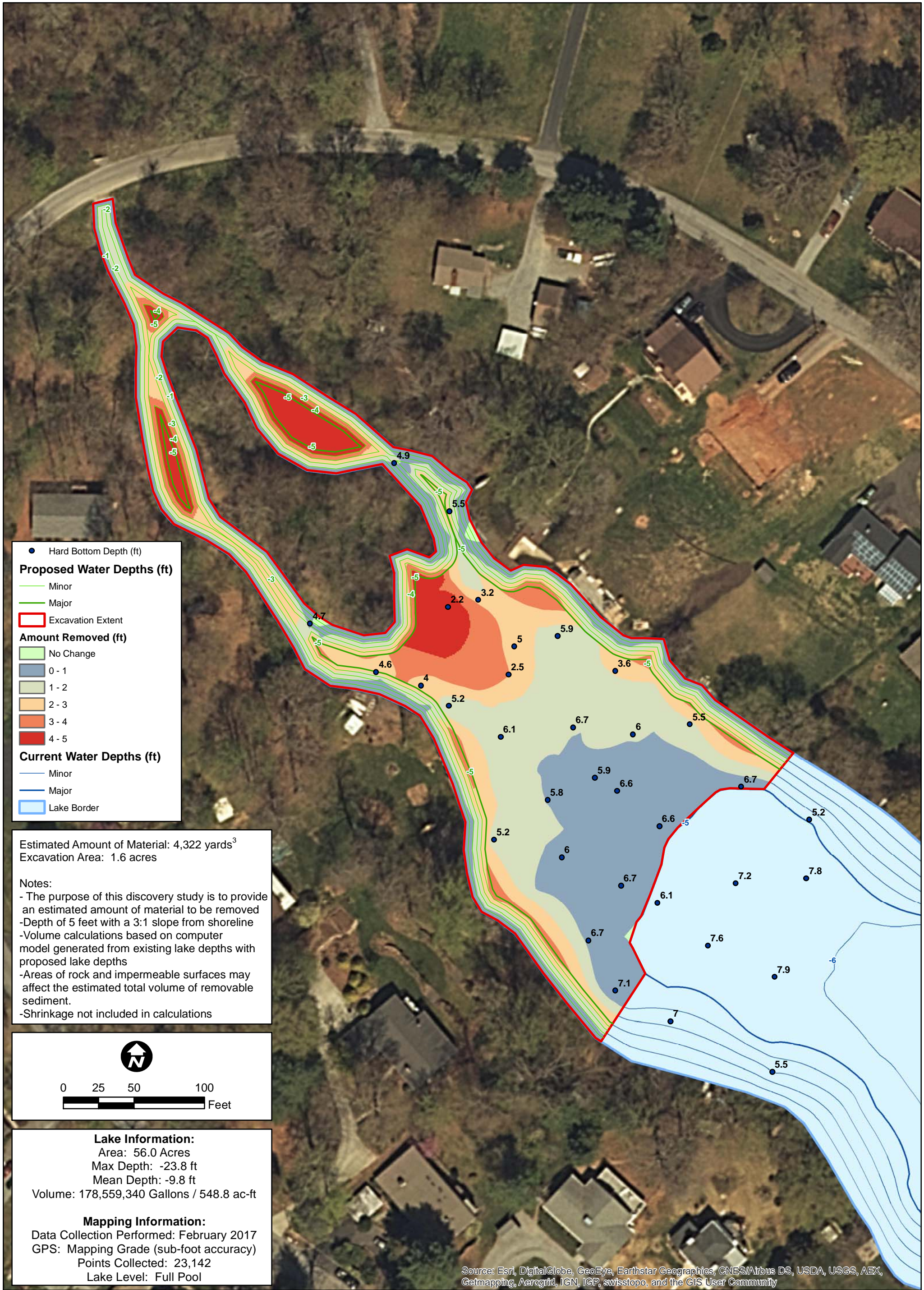
Source: VDEQ VEGIS system (2020), NTS

Dredging
Map

**Figure
4**



 <p>HURT & PROFFITT INCORPORATE</p> <p>2524 LANGHORNE ROAD LYNCHBURG, VA 24501 800.242.4906 TOLL FREE 434.847.7796 MAIN 434.847.0047 FAX WWW.HANDP.COM</p>	<p>Timberlake Sediment Removal Project Campbell County, Virginia</p> <p>Source: VDHR V-CRIS system (2020), NTS</p>	<p>Cultural Resources Map</p>	<p>Figure 5</p>
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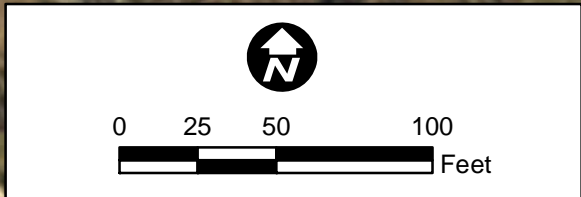


- Hard Bottom Depth (ft)
- Proposed Water Depths (ft)**
- Minor
- Major
- ▭ Excavation Extent
- Amount Removed (ft)**
- ▭ No Change
- ▭ 0 - 1
- ▭ 1 - 2
- ▭ 2 - 3
- ▭ 3 - 4
- ▭ 4 - 5
- Current Water Depths (ft)**
- Minor
- Major
- ▭ Lake Border

Estimated Amount of Material: 4,322 yards³
 Excavation Area: 1.6 acres

Notes:

- The purpose of this discovery study is to provide an estimated amount of material to be removed
- Depth of 5 feet with a 3:1 slope from shoreline
- Volume calculations based on computer model generated from existing lake depths with proposed lake depths
- Areas of rock and impermeable surfaces may affect the estimated total volume of removable sediment.
- Shrinkage not included in calculations



Lake Information:
 Area: 56.0 Acres
 Max Depth: -23.8 ft
 Mean Depth: -9.8 ft
 Volume: 178,559,340 Gallons / 548.8 ac-ft

Mapping Information:
 Data Collection Performed: February 2017
 GPS: Mapping Grade (sub-foot accuracy)
 Points Collected: 23,142
 Lake Level: Full Pool

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, ICP, swisstopo, and the GIS User Community

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● Hard Bottom Depth (ft)

Proposed Water Depths (ft)

— Minor

— Major

▭ Excavation Extent

Amount Removed (ft)

■ No Change

■ 0 - 1

■ 1 - 2

■ 2 - 3

■ 3 - 4

■ 4 - 5

Current Water Depths (ft)

— Minor

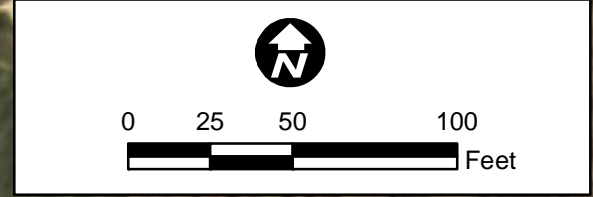
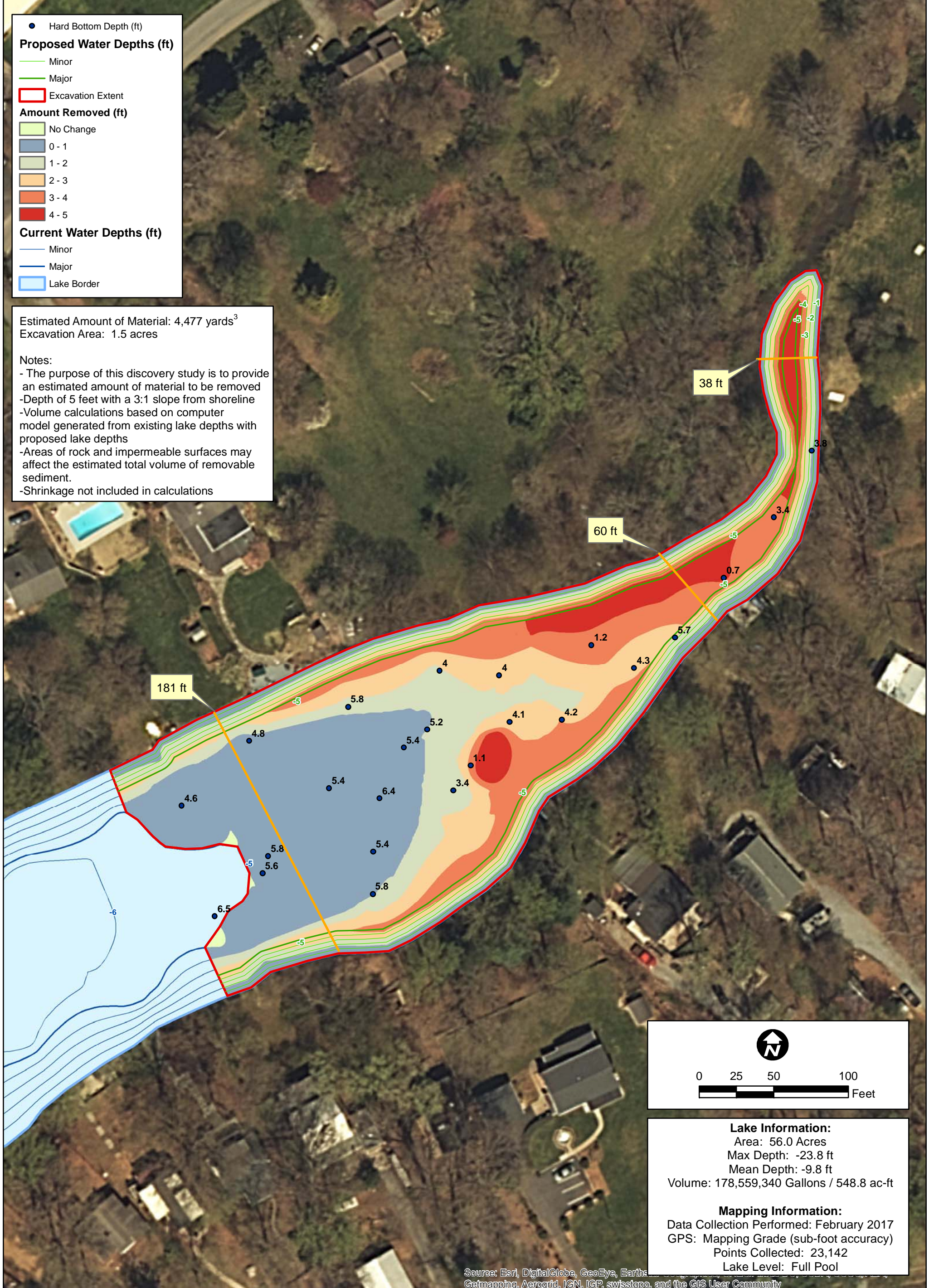
— Major

▭ Lake Border

Estimated Amount of Material: 4,477 yards³
 Excavation Area: 1.5 acres

Notes:

- The purpose of this discovery study is to provide an estimated amount of material to be removed
- Depth of 5 feet with a 3:1 slope from shoreline
- Volume calculations based on computer model generated from existing lake depths with proposed lake depths
- Areas of rock and impermeable surfaces may affect the estimated total volume of removable sediment.
- Shrinkage not included in calculations



Lake Information:
 Area: 56.0 Acres
 Max Depth: -23.8 ft
 Mean Depth: -9.8 ft
 Volume: 178,559,340 Gallons / 548.8 ac-ft

Mapping Information:
 Data Collection Performed: February 2017
 GPS: Mapping Grade (sub-foot accuracy)
 Points Collected: 23,142
 Lake Level: Full Pool

Source: Esri, DigitalGlobe, GeoEye, Earthstar, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

SOLITUDE LAKE MANAGEMENT **Timberlake - Cove 2 Excavation** **the MappingNetwork.**

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Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Estimated Amount of Material Removed: 8,905 yards³
Excavation Area: 2.7 Acres

- Notes:
- The purpose of this discovery study is to provide an estimated amount of soft sediment
 - Sediment volume calculations based on computer model generated from measurements collected in the field
 - Areas of rock and impermeable surfaces may affect the estimated total volume of removable sediment.
 - Shrinkage not included in calculations
 - Unable to predict the elevation of island above water level
 - Hardpan depths may be shallower than proposed

● Hard Bottom Depth (ft)

Current Water Depths (ft)

- Minor
- Major

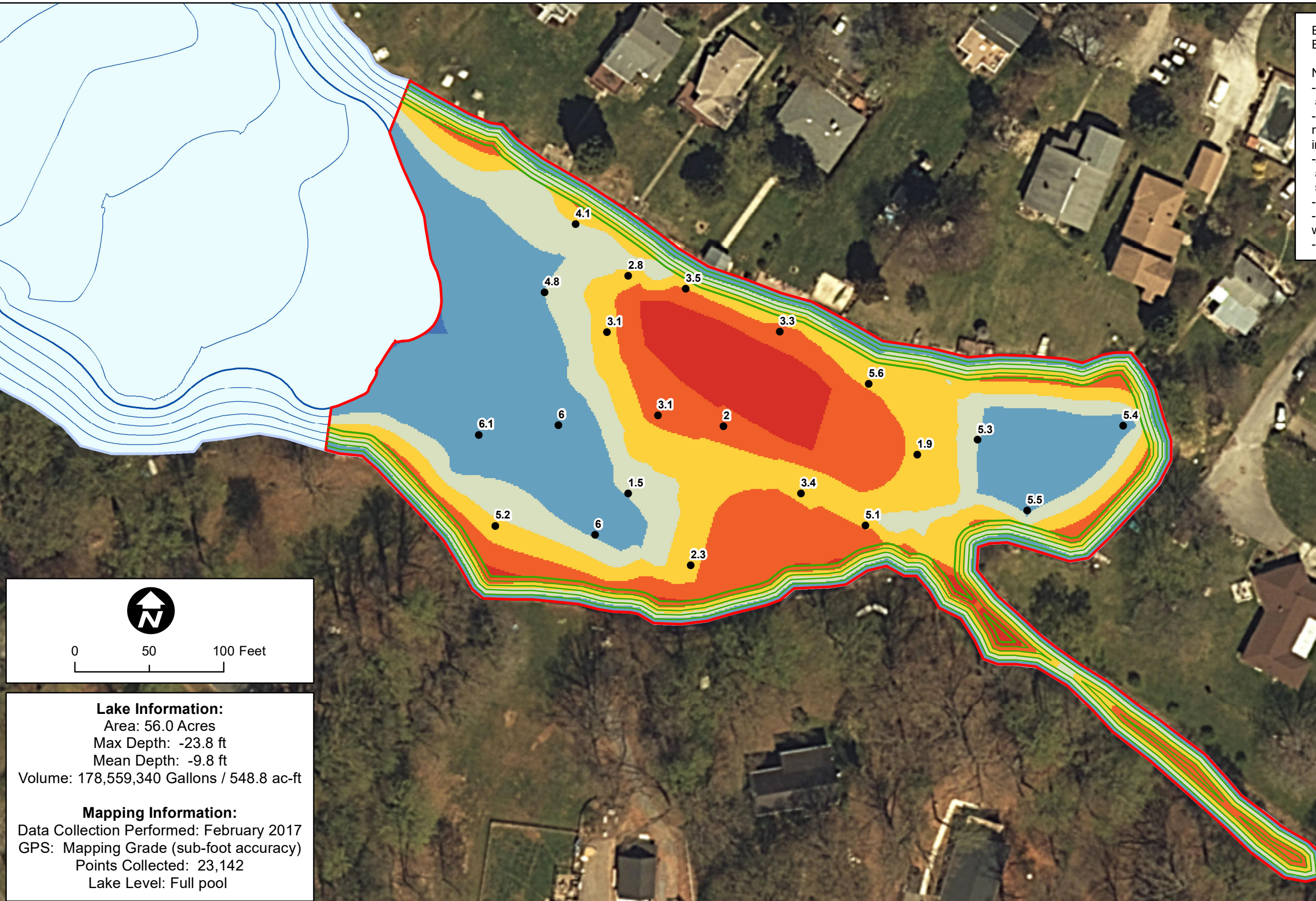
Proposed Water Depths (ft)

- Minor
- Major

▭ Excavation Extent

Amount Removed (ft)

- Unchanged
- 0 to 1
- 1 to 2
- 2 to 3
- 3 to 4
- 4 to 5



0 50 100 Feet

↑
N

Lake Information:
 Area: 56.0 Acres
 Max Depth: -23.8 ft
 Mean Depth: -9.8 ft
 Volume: 178,559,340 Gallons / 548.8 ac-ft

Mapping Information:
 Data Collection Performed: February 2017
 GPS: Mapping Grade (sub-foot accuracy)
 Points Collected: 23,142
 Lake Level: Full pool

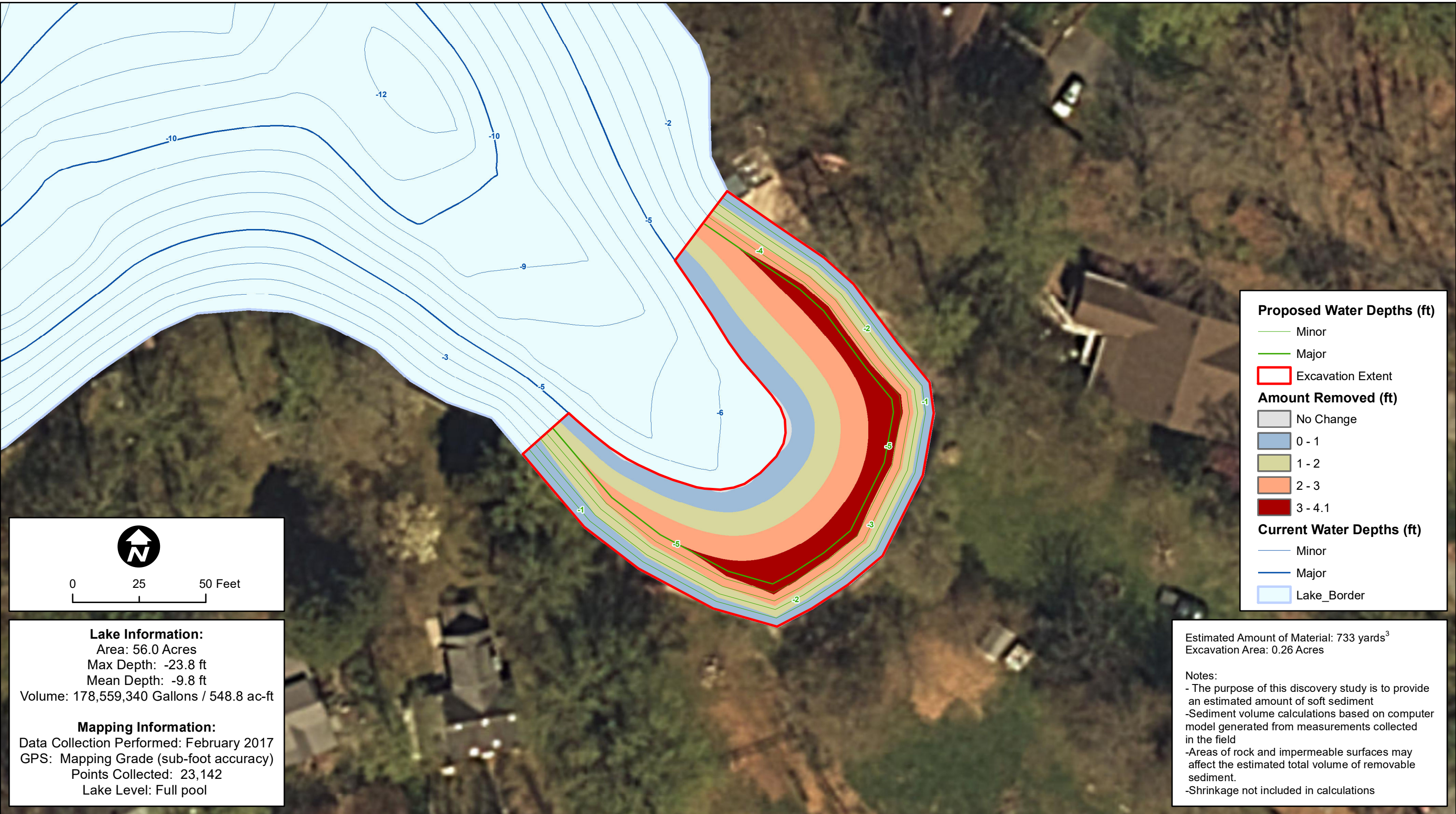


Timber Lake - Cove 3 Excavation



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Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



Proposed Water Depths (ft)

- Minor
- Major

Excavation Extent

Amount Removed (ft)

- No Change
- 0 - 1
- 1 - 2
- 2 - 3
- 3 - 4.1

Current Water Depths (ft)

- Minor
- Major
- Lake_Border

0 25 50 Feet

North Arrow

Lake Information:
 Area: 56.0 Acres
 Max Depth: -23.8 ft
 Mean Depth: -9.8 ft
 Volume: 178,559,340 Gallons / 548.8 ac-ft

Mapping Information:
 Data Collection Performed: February 2017
 GPS: Mapping Grade (sub-foot accuracy)
 Points Collected: 23,142
 Lake Level: Full pool

Estimated Amount of Material: 733 yards³
 Excavation Area: 0.26 Acres

Notes:

- The purpose of this discovery study is to provide an estimated amount of soft sediment
- Sediment volume calculations based on computer model generated from measurements collected in the field
- Areas of rock and impermeable surfaces may affect the estimated total volume of removable sediment.
- Shrinkage not included in calculations



Timber Lake - Cove 4 Excavation



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Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



Proposed Water Depths (ft)

- Minor
- Major
- Excavation Extent

Amount Removed (ft)

- No Change
- 0 - 1
- 1 - 2
- 2 - 3
- 3 - 4.3

Current Water Depths (ft)

- Minor
- Major
- Lake_Border

0 25 50 Feet

North Arrow

Lake Information:
 Area: 56.0 Acres
 Max Depth: -23.8 ft
 Mean Depth: -9.8 ft
 Volume: 178,559,340 Gallons / 548.8 ac-ft

Mapping Information:
 Data Collection Performed: February 2017
 GPS: Mapping Grade (sub-foot accuracy)
 Points Collected: 23,142
 Lake Level: Full pool

Estimated Amount of Material: 434 yards³
 Excavation Area: 0.17 Acres

Notes:

- The purpose of this discovery study is to provide an estimated amount of soft sediment
- Sediment volume calculations based on computer model generated from measurements collected in the field
- Areas of rock and impermeable surfaces may affect the estimated total volume of removable sediment.
- Shrinkage not included in calculations



Timber Lake - Cove 5 Excavation



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ATTACHMENT C

PHOTOGRAPHS



Photograph 1: Typical sediment deposit to be dredged (exposed at low water level)



Photograph 2: Proposed THA property sediment disposal area



Photograph 3: Sediment disposal area (to left), and concrete dam spillway (to right)



Photograph 4: Water return location (after de-watering in adjacent sediment disposal area)



ATTACHMENT D

PROTECTED SPECIES DATABASE RECORDS



Virginia Department of Game and Inland Fisheries

8/5/2020 1:01:20 PM

Fish and Wildlife Information Service

VaFWIS Search Report Compiled on 8/5/2020, 1:01:20 PM

[Help](#)

Known or likely to occur within a **2 mile radius around point a point 0.8 miles from Timberlake Populated Place Campbell (at 37,18,58.1 -79,16,16.8) in 019 Bedford County, 031 Campbell County, VA**

[View Map of Site Location](#)

559 Known or Likely Species ordered by Status Concern for Conservation (displaying first 37) (37 species with Status* or Tier I** or Tier II**)

BOVA Code	Status*	Tier**	Common Name	Scientific Name	Confirmed	Database(s)
060017	FESE	Ia	Spinymussel, James	Parvaspina collina		BOVA
010214	FESE	IIa	Logperch, Roanoke	Percina rex	Potential	BOVA,Habitat,HU6
050022	FTST	Ia	Bat, northern long-eared	Myotis septentrionalis		BOVA
060029	FTST	IIa	Lance, yellow	Elliptio lanceolata		BOVA,HU6
050020	SE	Ia	Bat, little brown	Myotis lucifugus		BOVA
050027	SE	Ia	Bat, tri-colored	Perimyotis subflavus		BOVA
110240	SE	Ia	Supercoil, spirit	Paravitrea hera		BOVA
040096	ST	Ia	Falcon, peregrine	Falco peregrinus		BOVA
040293	ST	Ia	Shrike, loggerhead	Lanius ludovicianus		BOVA,HU6
040379	ST	Ia	Sparrow, Henslow's	Centronyx henslowii	Yes	BOVA,BBA,SppObs,HU6
060173	FPST	Ia	Pigtoe, Atlantic	Fusconaia masoni		BOVA
060081	ST	IIa	Floater, green	Lasmigona subviridis		HU6
010127	ST	IIb	Madtom, orangefin	Noturus gilberti		BOVA
010353	ST	IIc	Darter, Carolina	Etheostoma collis		BOVA
040292	ST		Shrike, migrant loggerhead	Lanius ludovicianus migrans		BOVA
030031	CC	IIIc	Kingsnake, scarlet	Lampropeltis elapsoides		BOVA
030012	CC	IVa	Rattlesnake, timber	Crotalus horridus		BOVA,HU6
010174		Ia	Bass, Roanoke	Ambloplites cavifrons	Potential	BOVA,Habitat,HU6

010077		Ia	Shiner, bridle	Notropis bifrenatus		BOVA
040092		Ia	Eagle, golden	Aquila chrysaetos		BOVA
040040		Ia	Ibis, glossy	Plegadis falcinellus		BOVA,HU6
040306		Ia	Warbler, golden-winged	Vermivora chrysoptera		BOVA,HU6
100248		Ia	Fritillary, regal	Speyeria idalia idalia		BOVA,HU6
080216		Ib	Willowfly, cryptic	Taeniopteryx nelsoni		BOVA
020039		Ic	Salamander, Peaks of Otter	Plethodon hubrichti		BOVA
040213		Ic	Owl, northern saw-whet	Aegolius acadicus		BOVA,HU6
020023		IIa	Salamander, mole	Ambystoma talpoideum		BOVA
040052		IIa	Duck, American black	Anas rubripes		BOVA,HU6
040036		IIa	Night-heron, yellow-crowned	Nyctanassa violacea violacea		BOVA
040320		IIa	Warbler, cerulean	Setophaga cerulea		BOVA,HU6
040140		IIa	Woodcock, American	Scolopax minor	Potential	BOVA,BBA,HU6
040203		IIb	Cuckoo, black-billed	Coccyzus erythrophthalmus		BOVA
040105		IIb	Rail, king	Rallus elegans		BOVA
070138		IIc	Amphipod, Bland County	Crangonyx sp. 3		BOVA
080336		IIc	Beetle, Gammon's stenelmis riffle	Stenelmis gammoni		BOVA
100154		IIc	Butterfly, Persius duskywing	Erynnis persius persius		BOVA,HU6
100256		IIc	Crescent, tawny	Phyciodes batesii batesii		BOVA,HU6

To view **All 559 species** [View 559](#)

*FE=Federal Endangered; FT=Federal Threatened; SE=State Endangered; ST=State Threatened; FP=Federal Proposed; FC=Federal Candidate; CC=Collection Concern

**I=VA Wildlife Action Plan - Tier I - Critical Conservation Need;
 II=VA Wildlife Action Plan - Tier II - Very High Conservation Need;
 III=VA Wildlife Action Plan - Tier III - High Conservation Need;
 IV=VA Wildlife Action Plan - Tier IV - Moderate Conservation Need

Virginia Wildlife Action Plan Conservation Opportunity Ranking:

a - On the ground management strategies/actions exist and can be feasibly implemented.;

b - On the ground actions or research needs have been identified but cannot feasibly be implemented at this time.;

c - No on the ground actions or research needs have been identified or all identified conservation opportunities have been exhausted.

[View Map of All Query Results from All Observation Tables](#)

Bat Colonies or Hibernacula: **Not Known**

Anadromous Fish Use Streams

N/A

Impediments to Fish Passage

N/A

Colonial Water Bird Survey

N/A

Threatened and Endangered Waters

N/A

Managed Trout Streams

N/A

Bald Eagle Concentration Areas and Roosts

N/A

Bald Eagle Nests

N/A

Species Observations (11 records , 2 Observations with Threatened or Endangered species)

[View Map of All Query Results Species Observations](#)

obsID	class	Date Observed	Observer	N Species			View Map
				Different Species	Highest TE*	Highest Tier**	
459	SppObs	Jan 1 1989		1	ST	I	Yes
458	SppObs	Jan 1 1988		1	ST	I	Yes
331731	SppObs	Jan 1 1951	SKW-WHITT	1		III	Yes
604830	SppObs	Jul 1 2009	Kay; Lauterbach	1			Yes
376096	Aquatics	Aug 1 2006	Female resident of lake	1			Yes
303729	SppObs	Jul 1 2003	Gene Sattler	1			Yes
375333	Aquatics	Mar 10 1998	M. McGregor, P. Burgess	1			Yes
4632	SppObs	Jan 1 1988	Robert L. Eubank	1			Yes
4633	SppObs	Jan 1 1988	Robert L. Eubank	1			Yes
15198	SppObs	Apr 10 1970	S K WHITT	11			Yes

Displayed 11 Species Observations

Habitat Predicted for Aquatic WAP Tier I & II Species (2 Reaches)

[View Map Combined Reaches from Below of Habitat Predicted for WAP Tier I & II Aquatic Species](#)

Stream Name	Tier Species					View Map	
	Highest TE*	BOVA Code, Status*, Tier**, Common & Scientific Name					
Buffalo Creek (30101011)	FESE	010174		Ia	Bass, Roanoke	Ambloplites cavifrons	Yes
		010214	FESE	IIa	Logperch, Roanoke	Percina rex	
Buffalo Creek (30101012)	FESE	010174		Ia	Bass, Roanoke	Ambloplites cavifrons	Yes
		010214	FESE	IIa	Logperch, Roanoke	Percina rex	

Habitat Predicted for Terrestrial WAP Tier I & II Species

N/A

Virginia Breeding Bird Atlas Blocks (5 records)

[View Map of All Query Results Virginia Breeding Bird Atlas Blocks](#)

BBA ID	Atlas Quadrangle Block Name	Breeding Bird Atlas Species			View Map
		Different Species	Highest TE*	Highest Tier**	
37073	City Farm, CW	3		IV	Yes
37071	City Farm, NW	3			Yes
36074	Forest, CE	94		II	Yes
36072	Forest, NE	14		IV	Yes
36076	Forest, SE	75	ST	I	Yes

Public Holdings:

N/A

Summary of BOVA Species Associated with Cities and Counties of the Commonwealth of Virginia:

FIPS Code	City and County Name	Different Species	Highest TE	Highest Tier
019	Bedford	466	FESE	I
031	Campbell	364	FTSE	I

USGS 7.5' Quadrangles:

Forest
City Farm

USGS NRCS Watersheds in Virginia:

N/A

USGS National 6th Order Watersheds Summary of Wildlife Action Plan Tier I, II, III, and IV Species:

HU6 Code	USGS 6th Order Hydrologic Unit	Different Species	Highest TE	Highest Tier
JM10	Blackwater Creek	58	FTST	I
RU51	Elk Creek-Chestnut Branch	61	FESE	I
RU56	Buffalo Creek	56	FESE	I
RU58	Flat Creek	47	FESE	I

Compiled on 8/5/2020, 1:01:20 PM 11047454.0 report=all searchType=R dist= 3218.688 poi= 37,18,58.1 -79,16,16.8

PixelSize=64; Anadromous=0.026239; BBA=0.079388; BECAR=0.026942; Bats=0.025395; Buffer=0.099404; County=0.119383; HU6=0.161979; Impediments=0.027639; Init=0.216743; PublicLands=0.029217; Quad=0.068214; SppObs=0.412318; TEWaters=0.029121; TierReaches=0.071896; TierTerrestrial=0.055885; Total=1.656297; Tracking_BOVA=0.213427; Trout=0.028317; huva=0.048901

audit no. 1047454 8/5/2020 1:01:20 PM Virginia Fish and Wildlife Information Service

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- Home
- Map
- Species/Communities Search
- Terms & Conditions
- About Us
- Contact Us
- Help

Your Criteria

Taxonomic Group: Select All
 Watershed (8 digit HUC): 03010101 - Upper Roanoke River
 Subwatershed (12 digit HUC): RU56 - Buffalo Creek-Timber Lake
 Search Run: 8/5/2020 14:24:21 PM

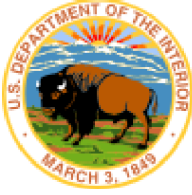
Result Summary

Total Species returned: 1
 Total Communities returned: 1

Click scientific names below to go to NatureServe report.

Click column headings for an explanation of species and community ranks.

Common Name/Natural Community	Scientific Name	Scientific Name Linked	Global Conservation Status Rank	State Conservation Status Rank	Federal Legal Status	State Legal Status	Statewide Occurrences	Virginia Coastal Zone
Upper Roanoke								
<i>Buffalo Creek-Timber Lake</i>								
TERRESTRIAL NATURAL COMMUNITY								
Central Appalachian Acidic Cove Forest (White Pine - Hemlock - Mixed Hardwoods Type)	Liriodendron tulipifera - Pinus strobus - Quercus (rubra, alba) - (Tsuga canadensis) / Polystichum acrostichoides Forest	Liriodendron tulipifera - Pinus strobus - Quercus (rubra, alba) - (Tsuga canadensis) / Polystichum acrostichoides Forest	G4?	S4	None	None	2	N
VASCULAR PLANTS								
Downy Phlox	Phlox pilosa	Phlox pilosa	G5	S1	None	None	11	N



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Virginia Ecological Services Field Office
6669 Short Lane
Gloucester, VA 23061-4410
Phone: (804) 693-6694 Fax: (804) 693-9032
<http://www.fws.gov/northeast/virginiafield/>

In Reply Refer To:

August 05, 2020

Consultation Code: 05E2VA00-2020-SLI-5401

Event Code: 05E2VA00-2020-E-14979

Project Name: Timberlake Dredging Project

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*). Any activity proposed on National Wildlife Refuge lands must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered

species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
 - USFWS National Wildlife Refuges and Fish Hatcheries
-

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Virginia Ecological Services Field Office

6669 Short Lane

Gloucester, VA 23061-4410

(804) 693-6694

Project Summary

Consultation Code: 05E2VA00-2020-SLI-5401

Event Code: 05E2VA00-2020-E-14979

Project Name: Timberlake Dredging Project

Project Type: DAM

Project Description: The proposed dredging project is necessary to remove accumulated sediment from five (5) coves around the lake. Coves will be dredged sequentially, with sediment to be wasted / placed at a THA property located southwest of the dam (where soil was previously removed to construct the dam itself). An estimated 17,000 cubic yards (cy) of water/ sediment will be dredged and pumped to the disposal site, and will be de-watered (using silt bags or a press system) to produce an estimated 13,000 cy of dry sediment/soil material. No permanent impacts to streams or wetlands are anticipated. Approximately 6.3 acres (ac) of surface water will be affected by the proposed dredging work, with an additional estimated 1.8 ac of disturbance at the sediment disposal site. The Buffalo Creek watershed at the dam is approximately 3.8 sq miles.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/37.3162430860107N79.27095155375457W>



Counties: Campbell, VA

Endangered Species Act Species

There is a total of 1 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

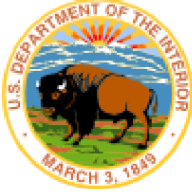
Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.



United States Department of the Interior



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Phone: (804) 693-6694 Fax: (804) 693-9032
<http://www.fws.gov/northeast/virginiafield/>

IPaC Record Locator: 241-22891265

August 05, 2020

Subject: Consistency letter for the 'Timberlake Dredging Project' project indicating that any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o).

Dear Ben Land:

The U.S. Fish and Wildlife Service (Service) received on August 05, 2020 your effects determination for the 'Timberlake Dredging Project' (the Action) using the northern long-eared bat (*Myotis septentrionalis*) key within the Information for Planning and Consultation (IPaC) system. You indicated that no Federal agencies are involved in funding or authorizing this Action. This IPaC key assists users in determining whether a non-Federal action may cause “take”^[1] of the northern long-eared bat that is prohibited under the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.).

Based upon your IPaC submission, any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o). Unless the Service advises you within 30 days of the date of this letter that your IPaC-assisted determination was incorrect, this letter verifies that the Action is not likely to result in unauthorized take of the northern long-eared bat.

Please report to our office any changes to the information about the Action that you entered into IPaC, the results of any bat surveys conducted in the Action area, and any dead, injured, or sick northern long-eared bats that are found during Action implementation.

If your Action proceeds as described and no additional information about the Action’s effects on species protected under the ESA becomes available, no further coordination with the Service is required with respect to the northern long-eared bat.

[1]Take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct [ESA Section 3(19)].

Action Description

You provided to IPaC the following name and description for the subject Action.

1. Name

Timberlake Dredging Project

2. Description

The following description was provided for the project 'Timberlake Dredging Project':

The proposed dredging project is necessary to remove accumulated sediment from five (5) coves around the lake. Coves will be dredged sequentially, with sediment to be wasted / placed at a THA property located southwest of the dam (where soil was previously removed to construct the dam itself). An estimated 17,000 cubic yards (cy) of water/sediment will be dredged and pumped to the disposal site, and will be de-watered (using silt bags or a press system) to produce an estimated 13,000 cy of dry sediment/soil material. No permanent impacts to streams or wetlands are anticipated. Approximately 6.3 acres (ac) of surface water will be affected by the proposed dredging work, with an additional estimated 1.8 ac of disturbance at the sediment disposal site. The Buffalo Creek watershed at the dam is approximately 3.8 sq miles.

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/37.3162430860107N79.27095155375457W>



Determination Key Result

This non-Federal Action may affect the northern long-eared bat; however, any take of this species that may occur incidental to this Action is not prohibited under the final 4(d) rule at 50 CFR §17.40(o).

Determination Key Description: Northern Long-eared Bat 4(d) Rule

This key was last updated in IPaC on **May 15, 2017**. Keys are subject to periodic revision.

This key is intended for actions that may affect the threatened northern long-eared bat.

The purpose of the key for non-Federal actions is to assist determinations as to whether proposed actions are excepted from take prohibitions under the northern long-eared bat 4(d) rule.

If a non-Federal action may cause prohibited take of northern long-eared bats or other ESA-listed animal species, we recommend that you coordinate with the Service.

Determination Key Result

Based upon your IPaC submission, any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o).

Qualification Interview

1. Is the action authorized, funded, or being carried out by a Federal agency?

No

2. Will your activity purposefully **Take** northern long-eared bats?

No

3. [Semantic] Is the project action area located wholly outside the White-nose Syndrome Zone?

Automatically answered

No

4. Have you contacted the appropriate agency to determine if your project is near a known hibernaculum or maternity roost tree?

Location information for northern long-eared bat hibernacula is generally kept in state Natural Heritage Inventory databases – the availability of this data varies state-by-state. Many states provide online access to their data, either directly by providing maps or by providing the opportunity to make a data request. In some cases, to protect those resources, access to the information may be limited. A web page with links to state Natural Heritage Inventory databases and other sources of information on the locations of northern long-eared bat roost trees and hibernacula is available at www.fws.gov/midwest/angered/mammals/nleb/nhisites.html.

Yes

5. Will the action affect a cave or mine where northern long-eared bats are known to hibernate (i.e., hibernaculum) or could it alter the entrance or the environment (physical or other alteration) of a hibernaculum?

No

6. Will the action involve Tree Removal?

No

Project Questionnaire

If the project includes forest conversion, report the appropriate acreages below. Otherwise, type '0' in questions 1-3.

1. Estimated total acres of forest conversion:

0

2. If known, estimated acres of forest conversion from April 1 to October 31

0

3. If known, estimated acres of forest conversion from June 1 to July 31

0

If the project includes timber harvest, report the appropriate acreages below. Otherwise, type '0' in questions 4-6.

4. Estimated total acres of timber harvest

0

5. If known, estimated acres of timber harvest from April 1 to October 31

0

6. If known, estimated acres of timber harvest from June 1 to July 31

0

If the project includes prescribed fire, report the appropriate acreages below. Otherwise, type '0' in questions 7-9.

7. Estimated total acres of prescribed fire

0

8. If known, estimated acres of prescribed fire from April 1 to October 31

0

9. If known, estimated acres of prescribed fire from June 1 to July 31

0

If the project includes new wind turbines, report the megawatts of wind capacity below. Otherwise, type '0' in question 10.

10. What is the estimated wind capacity (in megawatts) of the new turbine(s)?
0



ATTACHMENT E

CULTURAL RESOURCES RECORDS

Property Information

Property Names

Name Explanation	Name
Function/Location Current	Bridge, Timberlake Spillway, Route 624 Structure Number 6027

Property Evaluation Status

DHR Staff: Not Eligible

Property Addresses

Current - Route 624

County/Independent City(s): Campbell (County)

Incorporated Town(s): *No Data*

Zip Code(s): *No Data*

Magisterial District(s): *No Data*

Tax Parcel(s): *No Data*

USGS Quad(s): FOREST

Additional Property Information

Architecture Setting: *No Data*

Acreage: *No Data*

Site Description:

1994 Survey: Former Timberlake mid-late twentieth century residential community.

1994 Survey: There are no visible secondary resources associated with this property.

Surveyor Assessment:

No Data

Surveyor Recommendation: *No Data*

Ownership

Ownership Category	Ownership Entity
Public - State	<i>No Data</i>

Primary Resource Information

Resource Category: Transportation

Resource Type: Bridge

NR Resource Type: Structure

Historic District Status: *No Data*

Date of Construction:

Date Source: *No Data*

Historic Time Period: *No Data*

Historic Context(s): Transportation/Communication

Other ID Number: *No Data*

Architectural Style: No Discernable Style

Form: *No Data*

Number of Stories: *No Data*

Condition: *No Data*

Threats to Resource: None Known

Architectural Description:

1994 Survey: This bridge features one span and two lanes. The material of the substructure, foundations and abutments is concrete. The wings are constructed of stone masonry. The superstructure is constructed of concrete and the configuration of the spandrel is closed, slab, and filled. The bridge features a modern guardrail

Bridge Information

Structure Number: 6027
VDOT Bridge ID: *No Data*
Entity Crossed Name: Timberlake Spillway
Entity Crossed Type: *No Data*
Bridge Type: Arch
Current Use: Road
Number of Spans: 1
Number of Lanes: 1

Secondary Resource Information

Historic District Information

Historic District Name: *No Data*
Local Historic District Name: *No Data*
Historic District Significance: *No Data*

CRM Events

Event Type: DHR Staff: Not Eligible

DHR ID: 015-5007
Staff Name: HSTG
Event Date: 2/1/1998
Staff Comment:
No Data

Event Type: Survey:Phase I/Reconnaissance

Project Review File Number: *No Data*
Investigator: KMC, JLS
Organization/Company: Unknown (DSS)
Photographic Media: *No Data*
Survey Date: 4/3/1994
Dhr Library Report Number: *No Data*
Project Staff/Notes:
VTRC, Survey and Inventory Form: Concrete and Stone Arch Bridges

Bibliographic Information

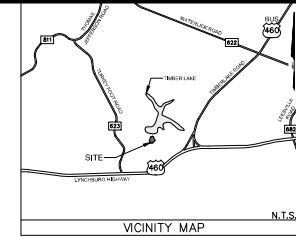
Bibliography:
No Data
Property Notes:
No Data



ATTACHMENT F

CONSTRUCTION DRAWING EXCERPTS

TIMBERLAKE DREDGE MATERIAL DISPOSAL LYNCHBURG, VIRGINIA



HURT & PROFFITT
INSPIRED / RESPONSIVE / TRUSTED

434-947-7796
2524 LANCHORNE ROAD
LYNCHBURG, VA 24501

HANDP.COM
LYNCHBURG, VA 24501

REGISTERED PROFESSIONAL ENGINEER
REGISTERED PROFESSIONAL LANDSCAPE ARCHITECT

COVER SHEET
FOR
TIMBERLAKE DREDGE MATERIAL DISPOSAL
LYNCHBURG, VA

PROJECT NO.	20190186
LAT.	37.313103°
LONG.	-79.273678°
DATE	7/30/2020
DRAWN BY:	ZPJ
CHECKED BY:	MDW



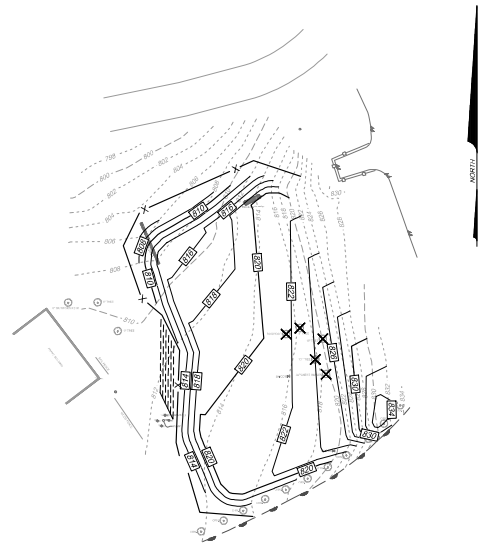
REVIEW SET

HURT & PROFFITT
SHEET NO. G-101 REV.

THIS SHEET IS INTENDED TO BE REPRODUCED AS PART OF THE PROJECT'S RECORD DRAWINGS. THE SCALE SHOWN ON THIS SHEET IS THE SCALE OF THE ORIGINAL DRAWING. ANY REPRODUCTION OF THIS SHEET SHALL BE AT THE USER'S RISK.

THE ENGINEER AND/OR SURVEYOR TAKES NO RESPONSIBILITY FOR THE LOCATION OR ACCURACY OF THE UTILITIES AS SHOWN HEREON OR ANY UTILITIES WITHIN THE PROJECT THAT MAY NOT BE SHOWN HEREON. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE UTILITY COMPANIES TO SEE IF ANY UTILITIES EXIST WITHIN THE AREA OF THE PROJECT BEFORE ANY CONSTRUCTION BEGINS. ANY COST INCURRED BY DAMAGING ANY UTILITY WITHIN THE PROJECT SHALL BE AT THE EXPENSE OF THE CONTRACTOR.

48 WORKING HOURS PRIOR TO STARTING THE WORK, THE CONTRACTOR SHALL CALL MISS UTILITY AT 1-800-852-7001 AND ADVISE THE NATURE AND LOCATION OF THE WORK.



- EXISTING LEGEND**
- IPF IRON PIN FOUND
 - IPS IRON PIN SET
 - WELL
 - ELECTRIC POLE
 - ELECTRIC MANHOLE
 - ELECTRIC PEDESTAL
 - GUY WIRE
 - TELEPHONE POLE
 - TELEPHONE PEDESTAL
 - TELEPHONE MARKER
 - TELEPHONE MANHOLE
 - CLEANOUT
 - WATER METER
 - WATER VALVE
 - STORM MANHOLE
 - SANITARY MANHOLE
 - FIRE HYDRANT
 - LIGHT POLE
 - EDGE OF PAVEMENT
 - EDGE OF GRAVEL
 - EDGE OF CONCRETE
 - CREEK
 - GAS VALVE
 - GAS METER
 - GAS MARKER
 - BENCHMARK
 - SIGN
 - WELL
 - GUARDRAIL
 - EDGE OF WOODS
 - FENCE
 - OH E — OVERHEAD ELECTRIC
 - OH T — OVERHEAD TELEPHONE
 - OH CTV — OVERHEAD CABLE TV
 - UG CTV — UG CABLE TELEVISION
 - UG E — UG ELECTRIC LINE
 - UG FO — UG FIBER OPTIC LINE
 - UG G — UG GAS LINE
 - SS — UG SAN. SEWER LINE
 - UG T — UG TELEPHONE LINE
 - UG W — UG WATER LINE
 - CONCRETE
 - BRICK

VIRGINIA UNIFORM CODING SYSTEM FOR EROSION AND SEDIMENT CONTROL PRACTICES
*CHART TAKEN FROM THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (JULY 1992)

- (SF) SILT FENCE (3.05)
- (IP) INLET PROTECTION (3.07)
- (CI) CULVERT INLET PROTECTION (3.08)
- (OP) OUTLET PROTECTION (3.18)
- (TS) TEMPORARY SEEDING (3.31)
- (PS) PERMANENT SEEDING (3.32)
- (ML) MULCHING (3.35)

- INDEX OF SHEETS**
- G-101 - COVER SHEET
 - G-102 - NOTES
 - G-103 - EROSION & SEDIMENT CONTROL NOTES
 - C-101 - SITE PLAN

PROPERTY OWNER
TIMBERLAKE HOMEOWNERS ASSOCIATION LLC
614 S. TIMBERLAKE DRIVE
LYNCHBURG, VA 24502
CONTACT: DENISE GILLET
434-509-7031

PROJECT APPLICANT
TIMBERLAKE WATERSHED IMPROVEMENT DISTRICT
614 S. TIMBERLAKE DRIVE
LYNCHBURG, VA 24502
CONTACT: GEORGE SCHRADER GILLET
434-401-0577

VIRGINIA CERTIFIED RESPONSIBLE LAND DISTURBER

NAME: _____ PRINTED SIGNATURE DATE _____

PHONE # _____ COMPANY _____

ADDRESS _____

GENERAL NOTES:

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THESE DRAWINGS AND SPECIFICATIONS AND STANDARD DETAILS. THE CONTRACTOR SHALL MAINTAIN A COPY OF THE DRAWINGS AND SPECIFICATIONS AT THE SITE AT ALL TIMES DURING CONSTRUCTION. EARTHWORK, GRADING, STORM DRAINAGE, AND PAVING SPECIFICATIONS AND DETAILS NOT COVERED BY THESE DRAWINGS AND THE SPECIFICATIONS SHALL CONFORM TO THE LATEST REVISION OF THE VDOT ROAD AND BRIDGE SPECIFICATIONS AND THE VDOT ROAD AND BRIDGE STANDARDS.
2. THIS TOPOGRAPHIC SURVEY WAS COMPLETED UNDER THE DIRECT RESPONSIBLE CHARGE OF J. ADAM BRYANT FROM AN ACTUAL GROUND SURVEY. THE DATA WAS OBTAINED APRIL 24, 2020. THIS MAP MEETS MINIMUM ACCURACY STANDARDS UNLESS OTHERWISE NOTED.
3. THE LOCATION, ELEVATION AND DIMENSIONS OF EXISTING STRUCTURES, PIPING AND UTILITIES SHOWN ARE BASED ON THE BEST AVAILABLE DATA AND ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY ALL DATA IN THE FIELD PRIOR TO CONSTRUCTION.
4. CONTACT MISS UTILITY (TELEPHONE NO. 811) 48 HOURS PRIOR TO PERFORMING ANY EXCAVATION TO HAVE UNDERGROUND UTILITIES MARKED. THE CONTRACTOR SHALL PERFORM ANY TEST PIT WORK OR PROVIDE LOCATION SERVICES AS REQUIRED TO AVOID CONFLICTS WITH EXISTING UTILITIES.
5. EROSION AND SEDIMENT CONTROL MEASURES SHALL COMPLY WITH THE VESCH, 1992 EDITION LATEST EDITION. THE CONTRACTOR SHALL MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES AS NECESSARY AND SHALL BE RESPONSIBLE FOR ALL ADDITIONAL MEASURES AS DETERMINED BY CAMPBELL COUNTY.
6. CONSTRUCTION LIMITS SHALL INCLUDE ALL DISTURBED AREAS. ALL DISTURBED AREAS SHALL BE SEEDED AND PROVIDED WITH EROSION CONTROL DURING AND AT THE END OF CONSTRUCTION.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS, PERFORMING ALL TESTS AND PAYING ALL FEES & BONDS AS DEEMED NECESSARY BY CAMPBELL COUNTY.
8. CONTRACTOR RESPONSIBLE FOR COORDINATING WITH THE VIRGINIA DEPARTMENT OF TRANSPORTATION, CAMPBELL COUNTY, AND OTHER GOVERNING BODY, PERMITS AND INSPECTIONS AS REQUIRED. ALL WORK DONE WITHIN THE RIGHT OF WAY WILL BE GOVERNED BY THE SPECIAL PROVISIONS INCLUDED IN THE LAND USE PERMIT. CONTRACTOR RESPONSIBLE FOR OBTAINING LAND USE PERMIT.
9. VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE CONSTRUCTED AND MAINTAINED FOR ALL DISTURBED AREAS IN ACCORDANCE WITH ALL LOCAL REQUIREMENTS AND THE LATEST EDITION OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK. ALL EROSION AND SEDIMENTATION CONTROL DEVICES SHALL BE INSTALLED AS A FIRST STEP IN CONSTRUCTION AND BEFORE EXCAVATION BEGINS.
10. ALL SLOPES STEEPER THAN 2:1 SHALL BE PROTECTED WITH VDOT EC-2 EROSION CONTROL MATTING FROM TOP OF SLOPE TO TOE OF SLOPE. THE CONTRACTOR SHALL ENSURE THE PROPER INSTALLATION OF SUCH MEASURES IN ACCORDANCE WITH VIRGINIA EROSION AND SEDIMENT CONTROL REGULATIONS AND THE MANUFACTURERS WRITTEN RECOMMENDATIONS.
11. THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE AND LOCAL CONFINED SPACE ENTRY REGULATIONS.
12. MAINTAIN ALL OVERHEAD AND UNDERGROUND ELECTRICAL, TELEPHONE, WATER AND GAS SERVICES AND ALL OTHER UTILITIES DURING ENTIRE CONSTRUCTION PERIOD. UTILITY OUTAGES WILL NOT BE ALLOWED.
13. THE CONTRACTOR SHALL MAINTAIN SURFACE DRAINAGE DURING CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL PUMPS AND PIPING REQUIRED TO MAINTAIN SURFACE DRAINAGE.
14. CONSTRUCT EXCAVATION SUPPORT SYSTEMS AS REQUIRED BY OSHA AND U.S. ARMY CORPS OF ENGINEERS SAFETY & HEALTH REQUIREMENTS MANUAL, EM 385-1-1 AND SECTIONS 23.4 AND 23.8 TO ADEQUATELY SUPPORT EXISTING SOIL AND ADJACENT STRUCTURES DURING EXCAVATION ACTIVITIES. THE CONTRACTOR SHALL PROVIDE THE OWNER WITH INSTALLATION DRAWINGS, SPECIFICATIONS, AND DESIGN CALCULATIONS STAMPED BY PROFESSIONAL ENGINEER LICENSED BY THE COMMONWEALTH OF VIRGINIA FOR ALL EXCAVATION SUPPORT SYSTEMS.
15. SUBSURFACE EXPLORATION HAS NOT BEEN PERFORMED FOR THE PROJECT SITE. ALL EARTHWORK EXCAVATION SHALL BE UNCLASSIFIED AND SHALL BE PERFORMED TO THE INDICATED ELEVATIONS AT NO ADDITIONAL COST TO THE OWNER. SEE PROJECT MANUAL FOR ADDITIONAL INFORMATION.
16. THE CONTRACTOR SHALL BE FULLY LIABLE FOR REPAIR OF ANY DAMAGES ON PUBLIC OR PRIVATE PROPERTY CAUSED BY HIS CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL REPLACE ALL DISTURBED SURFACES IN KIND, INCLUDING PAVEMENT, STONE, DITCHES, MAILBOXES, STORM CULVERTS, FENCING, ETC. AT NO ADDITIONAL COST TO THE OWNER.
17. ALL EXISTING SIGNS, CURBS, GUARDRAIL FENCING, STONE, STRUCTURES, LANDSCAPING, PLANTERS, SHRUBS, AND OTHER PHYSICAL IMPROVEMENTS TEMPORARILY REMOVED BY THE CONTRACTOR SHALL BE REPLACED TO ORIGINAL CONDITION.
18. ALL ASPHALT DRIVEWAYS, PARKING LOTS AND ROADS DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE RETURNED TO ORIGINAL CONDITION AFTER CONSTRUCTION.
19. THE CONTRACTOR SHALL PROTECT EXISTING PAVED SURFACES. ANY DAMAGED PAVEMENT SHALL BE REPAIRED TO MATCH EXISTING. TRACKED EQUIPMENT WILL NOT BE ALLOWED ON PAVED SURFACES. ANY PAVEMENT MARKINGS DAMAGED BY CONSTRUCTION SHALL BE REPLACED IN KIND BY A PAVEMENT MARKING CONTRACTOR FROM THE VDOT PRE-QUALIFICATION LIST.
20. ALL PROPERTY PINS DISTURBED DURING CONSTRUCTION SHALL BE REPLACED BY A LAND SURVEYOR LICENSED IN THE COMMONWEALTH OF VIRGINIA AT CONTRACTOR'S EXPENSE.
21. DISPOSE OF SURPLUS SOIL MATERIAL OFF THE OWNER'S PROPERTY IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS.

22. THE CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION FROM PROPERTY OWNERS FOR USE OF ANY ACCESS POINTS OTHER THAN THOSE LOCATED WITHIN RIGHT-OF-WAYS AND OBTAINED EASEMENTS. WRITTEN PERMISSION SHALL CONTAIN CONDITIONS FOR USE AND RESTORATION AGREEMENTS BETWEEN PROPERTY OWNER AND CONTRACTOR.
23. TREES AND SHRUBS TO REMAIN IN PLACE SHALL BE ROPED OFF DURING GRADING OPERATIONS TO KEEP EQUIPMENT AWAY FROM ROOT SYSTEMS. THE CONTRACTOR SHALL MAKE SELECT CUTTING OF TREES, TAKING THE SMALLEST TREES FIRST, THAT ARE MANDATORY FOR WATER LINE CONSTRUCTION.
24. ANY FENCING DISTURBED BY CONSTRUCTION SHALL BE IMMEDIATELY REPLACED OR SUPPLEMENTED BY TEMPORARY FENCING SUITABLE FOR INTENDED PURPOSE OF EXISTING FENCING. THE CONTRACTOR SHALL REPAIR AND/OR REPLACE DISTURBED FENCING TO ORIGINAL CONDITION.
25. ALL CLEARED MATERIALS TO BE REMOVED FROM SITE AND DISPOSED OF LEGALLY AT THE CONTRACTOR'S EXPENSE.
26. CONTOUR INTERVAL ON ALL PLAN AND PROFILE, AND SITE PLAN SHEETS ARE 2'. THE UTILITIES SHOWN HEREON ARE PLOTTED PER VISIBLE EVIDENCE IN THE FIELD AND THE MARKINGS OF MISS UTILITY OF VIRGINIA. THIS SURVEY CANNOT GUARANTEE THAT ALL UTILITIES WITHIN THE PROJECT AREA HAVE BEEN LOCATED. IT SHALL BE THE RESPONSIBILITY OF THE OWNER/CONTRACTOR TO HAVE UNDERGROUND UTILITIES MARKED PRIOR TO LAND DISTURBANCE/EXCAVATION OF ANY KIND. HOWEVER, THE CONTRACTOR IS STILL RESPONSIBLE TO CONTACT MISS UTILITY TO HAVE ALL UTILITIES MARKED PRIOR TO ANY EXCAVATION.
27. ANY VDOT SIGNAGE THAT IS TAKEN DOWN IS TO BE SAFEGUARDED AND PUT BACK IN THE SAME LOCATION BY THE CONTRACTOR.
28. ANY PRIVATE ITEMS WITHIN THE RIGHT-OF-WAY SHALL BE PROTECTED AND IF NECESSARY REMOVED AND REPLACED IN THE SAME LOCATION.
29. LAYDOWN & CONSTRUCTION STAGING AREAS WILL BE PROVIDED BY THE CONTRACTOR AT THE CONTRACTORS EXPENSE.

DREDGING NOTES:

1. DREDGING TO BE BY HYDRAULIC EQUIPMENT.
2. DREDGING OPERATIONS TO BE IN ACCORDANCE WITH APPROVED DREDGING PERMIT.
3. CONTRACTOR TO PLACE DREDGED MATERIAL AT AGREED LOCATION.
4. CONTRACTOR IS RESPONSIBLE FOR TRANSPORT AND DISPOSAL OF ALL DREDGED MATERIAL.

CONSTRUCTION SEQUENCE:

1. INSTALL CONSTRUCTION ENTRANCE.
2. INSTALL PERIMETER CONTROLS AND ALL APPURTENANCES AS SHOWN ON THE PLANS.
3. EXCAVATE AREA FOR DREDGE MATERIALS.
4. DREDGE CONTRACTOR TO INSTALL LINER, DEWATERING BAGS/TUBES, AND DEWATER LINE TO TIMBERLAKE BEHIND THE SILT CURTAIN NOTED IN THE DREDGE PERMIT.
5. DREDGE TIMBERLAKE PER SEPARATE DREDGE PERMIT.
6. CAP DISPOSAL AREA.
7. INSTALL PERMANENT SEEDING AND EROSION CONTROLS TO ALL DISRUPTED AREAS.
8. AFTER COMPLETION OF THE PROJECT, ALL DISTURBED AREAS: HAUL ROADS, CONSTRUCTION ROADS, LAYDOWN AREAS, ETC SHALL BE RESTORED.

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LYNCHBURG, VA 24061

LANDSCAPE ARCHITECTURE
CONSTRUCTION MANAGEMENT
CULTURAL RESOURCES



NOTES FOR
TIMBERLAKE DREDGE MATERIAL DISPOSAL
LYNCHBURG, VA

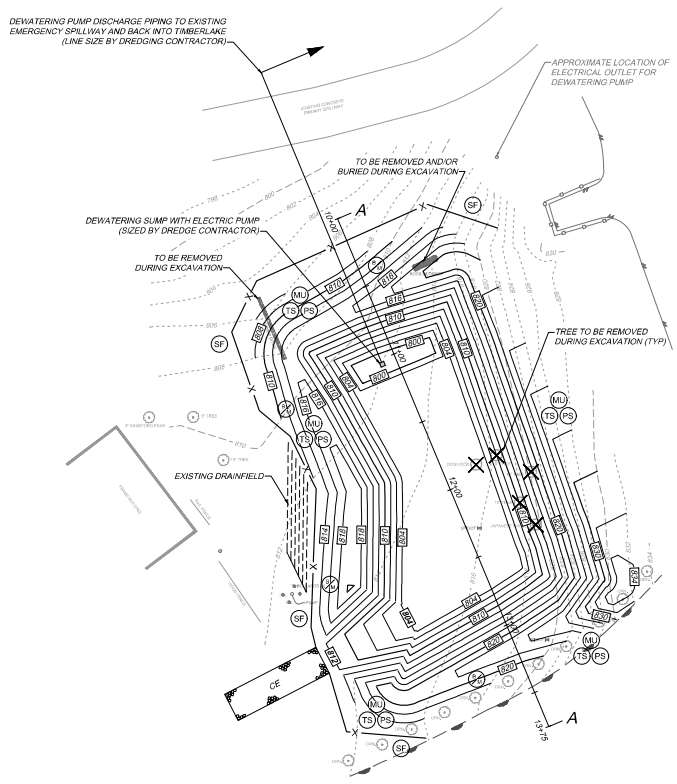
PROJECT NO.	20190186
LAT.	37.313103°
LONG.	-79.273678°
DATE	7/30/2020
DRAWN BY:	TPJ
CHECKED BY:	MDW



REVIEW SET

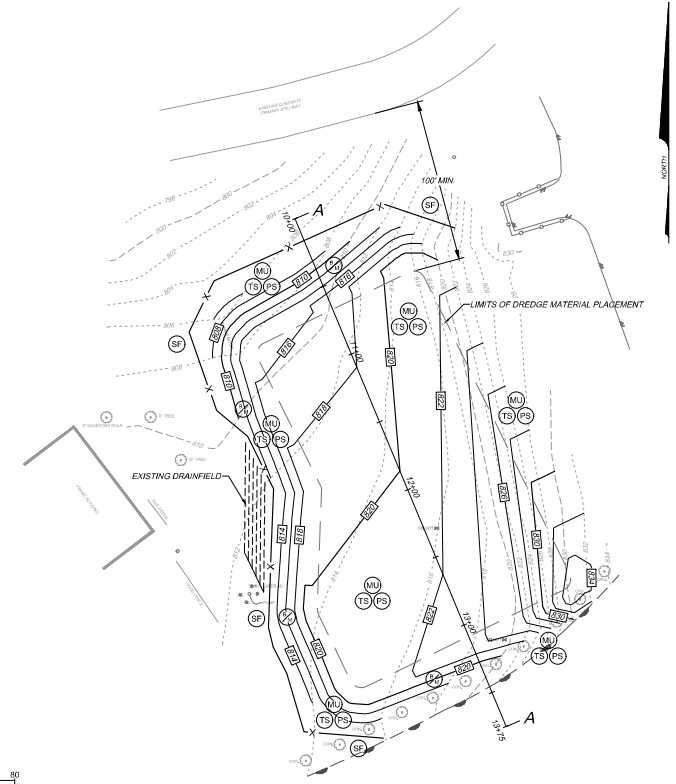
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THE SHEET IS INTENDED TO BE REPRODUCED AS PART OF A PROJECT. REPRODUCTION OF THIS SHEET AS A SEPARATE FILE IS PROHIBITED. THE USER SHALL BE RESPONSIBLE FOR THE PROTECTION OF THE SHEET FROM UNAUTHORIZED USE.

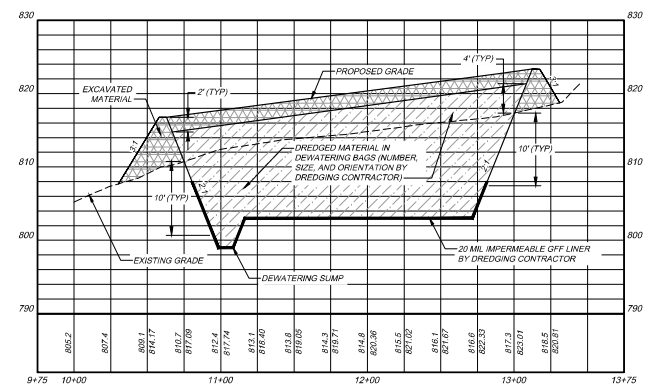
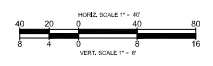


EXCAVATION PLAN

EXCAVATION VOLUME = 8,439 CY
 DREDGE MATERIAL PLACEMENT VOLUME = 14,200 CY (INCLUDING A 10% RATE OF COMPACTION)



FINAL GRADING PLAN



SECTION A-A

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**SITE PLAN
 FOR
 TIMBERLAKE DREDGE MATERIAL DISPOSAL
 LYNCHBURG, VA**

PROJECT NO.	20190186
LAT.	37.313103°
LONG.	-79.273678°
DATE	7/30/2020
DRAWN BY:	TPJ
CHECKED BY:	MDW



**REVIEW
 SET**

HURT & PROFFITT	
SHEET NO.	REV.
C-101	